

# **AMERICAN GAS ASSOCIATION MONTHLY**

**FEBRUARY • 1937**

**The Golden Faucet Sales Contest**

**R. E. WILLIAMS**

•

**A Glance at the Rate Situation**

**A. I. PHILLIPS**

•

**The 1937 Gasco Food Institute**

**J. E. HUMPHREYS**

•

**New Domestic Gas Range Research**

**F. J. RUTLEDGE**



# *New Bulletin*

## **ON DOMESTIC GAS RANGE RESEARCH**

An 85-page illustrated report, issued as Bulletin No. 7, outlining the results of the first 12 months' research work on gas ranges conducted by the A. G. A. Testing Laboratories under the supervision of the Committee on Domestic Gas Research is now available.

The fundamental studies reported in Bulletin No. 7 relate to certain phases of oven, broiler and top burner performance involving such factors as combustion, heat losses, insulation, venting, efficiency, speed, etc., and should be found of particular interest to all manufacturers of gas ranges as well as to utility companies.

The bulletin was prepared for the purpose of making available to the industry the data obtained during the first phases of this study. While the results presented are neither complete nor conclusive in every respect, it is believed that sufficient data have been collected to warrant publication. Additional basic research is now being conducted for the purpose of supplementing the data in Bulletin No. 7.

Copies of the bulletin may be secured by members of the Association at the following prices:

First copy	\$1.00
Next 24 copies	.75 each, plus postage
Additional copies	.50 each, plus postage

Address either American Gas Association, 420 Lexington Ave., New York City, or A. G. A. Testing Laboratories, 1032 East 62d Street, Cleveland, Ohio.

# AMERICAN GAS ASSOCIATION MONTHLY

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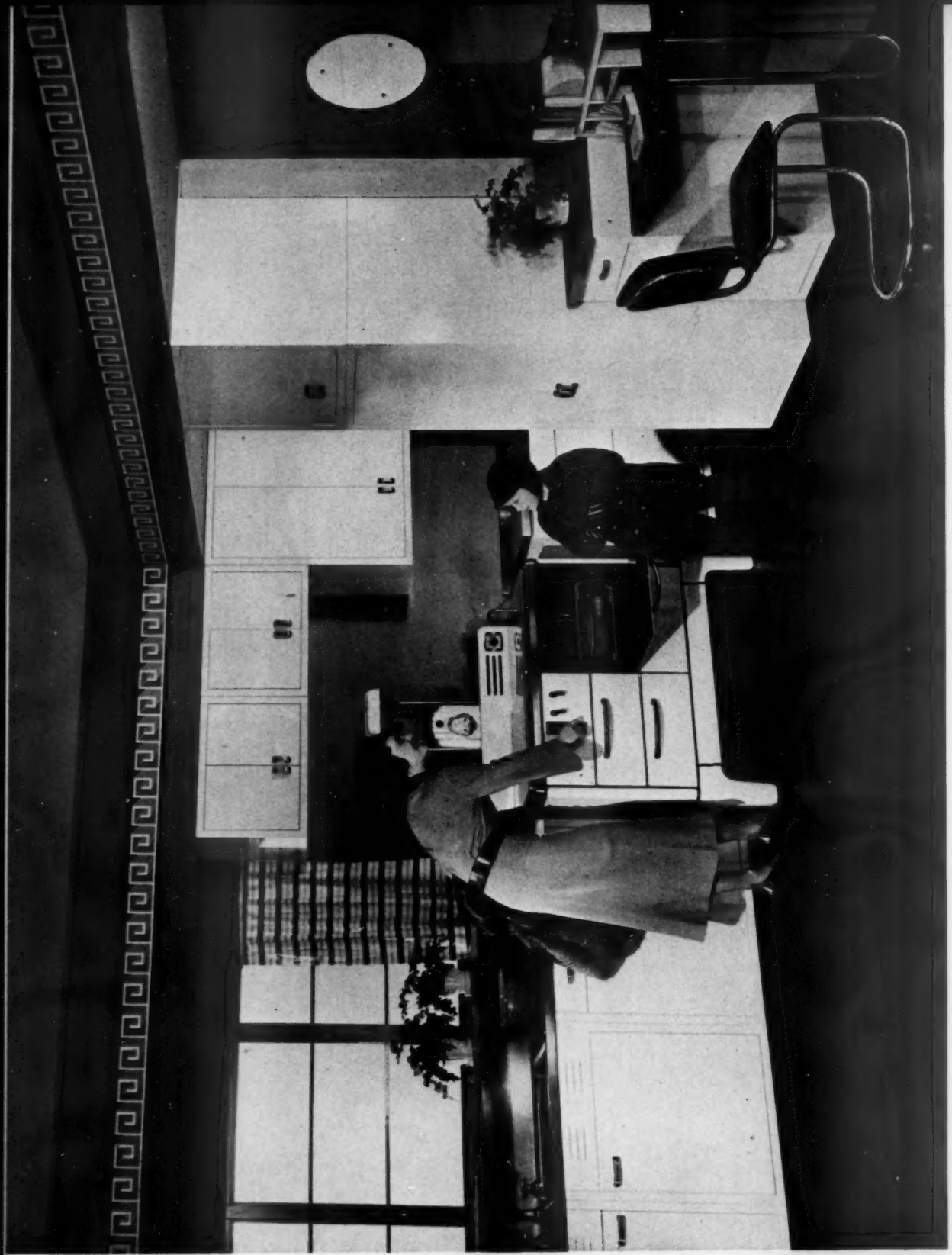
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The above illustration, reproduced in four beautiful colors, will dominate an A.G.A. ad entitled "Find Out About Controlled Cooking With Gas" which will appear in the Saturday Evening Post, February 13. Watch for future Post illustrations of ultra modern kitchen settings featuring the latest developments in gas ranges. As one commentator declares, "They make you feel proud to be in the gas business."

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# AMERICAN GAS ASSOCIATION MONTHLY

James M. Beall, Editor

## Spotlighting Gas Ranges

AS the national advertising program advances, its accomplishments and its possibilities become more and more apparent. A significant development is the increased interest of national magazines, news syndicates and newspapers in the tremendous improvements in gas ranges. Hitherto, competing fuels and appliances had almost a monopoly on household pages, editorial articles and special features describing home equipment. Today the picture is rapidly changing. Gas has stepped boldly into the pages of many of the leading magazines and newspapers and is receiving recognition not heretofore accorded it.

A number of editors and special writers attended the last A. G. A. convention in Atlantic City. They heard what the gas industry was doing; they inspected the modern gas appliances on display there; they noted the amazing advances in gas equipment—the increased efficiency, beautiful new lines, perfect heat control, and various new gadgets—and they were impressed. They came back, obtained additional data and illustrations, and wrote about these things. The result is an invaluable aid to the modern acceptance of gas fuel.

Just what are they saying about gas? Turn to page 58 of this issue and read the article, "Let's Talk Gas Ranges," by Constance Holland which is reprinted from the February issue of *Delineator*. Miss Holland made a special trip to the A. G. A. convention to get her information. She says of gas ranges: "They certainly hit a new high in eye appeal. They are trim and slick and clean-looking; easy to clean." Then, repeating that old adage, "handsome is as handsome does," she goes on to describe in glowing terms the mechanical improvements which make gas cooking a joy. The article is illustrated with closeups showing various features of one of the latest gas ranges, which, unfortunately, we were unable to secure in time for publication in this issue. It is safe to

assume that it has been read with great interest by a large proportion of *Delineator's* million and a half readers.

*Pictorial Review*, with a circulation of two and a quarter million, carried in its November issue an even more elaborate article entitled, "The Modern Gas Range Gives a New Heart to Home." Written by Esther Kimmel, food and home management editor, it devoted several pages and compelling illustrations to high praise of gas cooking. It makes exciting and interesting reading—and has its effect.

And that's not all. In a five-column illustrated spread, King Features, a leading news syndicate supplying material for hundreds of newspapers throughout the United States, recently issued a story on the testing operations of the A. G. A. Laboratories. The story revealed the fact that every gas range is submitted to 529 separate laboratory tests before having placed upon it the A. G. A. seal of approval. It related how the gas industry employs scientific methods to help solve many of the problems of the homemaker. It mentioned such features as temperature control, clock control, automatic ignition, heat distribution, oven heating capacity, evenness of heat distribution, surface temperatures, flexibility of measured heat and other details. In short, this single story carried to millions of newspaper readers a message of constructive value to our industry.

To further round out the picture, the *New York Sun*, January 11, gave fine display space on its home page to two model all-gas kitchens in an article called "Even Kitchens Are Invaded by the Modern Swing Theme." This article, later distributed by the well-known Bell Syndicate, refers to the table top gas range as "the crowning glory of the modern kitchen." It is only one of many hundreds of clippings which have resulted from publicity activities supplementing the national advertising program.

# The 1937 Gasco Food Institute

## A Description of How One Gas Company Is Walling-in Its Customers against the Invasion of Electric Competition

**L**IKE other gas utilities, The Ohio Fuel Gas Company knows the value of its service in proportion to competitive fuels. It realizes that long-time use of its product has caused it to be accepted as commonplace by a majority of its customers. It knows that its customers must have a sudden injection of thought to impress them that gas service has kept abreast of modern times, or a number of them will succumb to the promotional efforts of the electric industry.

To date, only a negligible fraction of gas-cooking customers have been lost by Ohio Fuel to the competition of electricity, but the company wants to save this base load of its business before the situation becomes acute.

The first impulse was to out-advertise our competitors, and give our customers a bang-up campaign that would leave no doubt in their minds that gas is the truly modern fuel for kitchen use. One means of helping accomplish this would be to out-buy our competitors in advertising space and media. In our territory the average customer, using gas for cooking only, pays the company a gross income of from \$12 to \$15 a year. To do the same cooking job electrically costs from \$30 to \$50 a year. Thus, while we have tremendous cost advantage in serving the customer, we have a three-time handicap in matching advertising appropriations. The electric industry could well spend three or four times the amount in gaining a new customer than we could spend in holding an old one.

When the electric company adds a new customer on its cooking load, it is the same as adding a new user for all other electric services. When we lose a customer on the gas cooking load, we stand to lose one on water heating also, and the chances of selling

By **JAMES E. HUMPHREYS**

Advertising Manager,  
The Ohio Fuel Gas Company

a gas-refrigerator become almost nil. However, if we sell a gas refrigerator while the gas range is still in use, the customer becomes so impressed that gas is modern that the door is literally closed to the electric range.

Considering that there is but one gas refrigerator of general distribution on the market, we feel that our sales

across in the manner that it could be in a school that held closer to the principles of cooking. We entered these schools feeling that it was worth something to have gas represented rather than another fuel. Likely we will continue to enter certain cooking schools for this reason.

From our experience in presenting cooking demonstrations before organizations and school classes, we felt that interest in this subject was high and that we could use this means of promo-

tion to put our story across in large schools under our own supervision. It was decided that the schools we would present must be utterly different from the old type cooking schools if they were to be a topic of discussion among housewives. Also, they must be promoted "to the sky," yet held within a reasonable budget. Miss Hulda Ungericht, director of Home Service, and the Ad-

vertising Department started work on such a plan in the spring of 1936, under the supervision of Frank T. Rainey, business promotion manager. With the cooperation of our advertising agency, Harry M. Miller, Inc., the plan was completed by midsummer and compiled into a mimeographed prospectus. When the schools were started some weeks later, only one or two minor changes had been made in the original prospectus.

The schools themselves are the climax to our efforts, though the promotion that preceded them is discussed first to preserve the order of sequence. It was decided that these cooking schools would be known as "The 1937 Gasco Food Institute," hereafter referred to as the "Institute." Each Institute would run for three days, and they would be presented in 40 of the key cities we serve. In order to include all of them during the months of cool



James E. Humphreys  
Advertising Manager



Hulda Ungericht  
Home Service  
Director



Frank T. Rainey  
Business Promotion  
Manager

of this item have been most satisfactory. Yet, the job of saturating our territory with a dominating number of gas refrigerators is too slow to meet the storm of advertising and promotion that the electric companies are using to capture our cooking load. Finding that we could not afford to spend enough money to out-advertise the electric companies, nor do a fast enough job in selling gas refrigerators, we were forced to find another means of impressing our customers that gas is the ideal kitchen fuel.

As have all utilities, we have had experience with cooking schools conducted by local newspapers. The lecturer often is obligated to so many accounts, ranging from beauty parlors and washing machines to fabric dyes, that she has little time to devote to actual cooking—the real purpose of the school. In such schools as we entered, we did not feel that our story was put





*Opening day Institute crowd in one of the larger cities. Prizes were being drawn when the picture was taken*

or four of the towns had weekly papers which agreed to run special editions to promote and report the Institutes. In each city, other cooking schools and civic events had to be taken into consideration to prevent conflicts. After considerable "checker playing" with schedules, our two units were booked solid from October 20, 1936 into April 1937, omitting Thanksgiving week and the last three weeks in December.

#### *The Institute Plan*

Now that the promotion and schedules are explained, let's see how the plan works. An advance man is placed on the road to work with newspapers in selling cooperative advertising. He works several weeks ahead of the Institute and confers with the paper to see that there is complete understanding as to our mutual obligations. Together with our local manager and district home service representative, he discusses with the newspaper representative the accounts which should be solicited for cooperative advertising. This agreed, he solicits the accounts with the newspaper representative, sometimes with assistance of the local

manager or home service representative. Our representatives sell the accounts on the advantages of the Institute and the newspaper representative sells them on space in his paper.

The grocery account is looked upon as the key cooperating account because its products are used so many times. This account must take more space than other accounts, usually from one to two pages. Frequently excluded from this account and sold separately are fruits and vegetables, coffee, sugar, flour, extract, crackers and cakes. Either one or two independent chains usually are sold as the grocery account. When two are used, one takes canned goods, the other package and bulk goods. Other food accounts are meat, dairy products and fresh baked goods. Two of our recipes use ginger ale, so a soft drink account is sold. Our traveling kitchens use Curtis cabinets, and the local lumber yard is solicited for this tie-in. Wear-Ever aluminum ware is used in our demonstrations, so a kitchen ware dealer is solicited. Armstrong floor covering is used, permitting another dealer to cooperate. In several cities where display space was available, a furniture account displayed

a dining room suite, the table being set by a local jeweler. In a few instances, an automobile dealer cooperated by furnishing the "official" car to transport our traveling representative about the city. A florist usually decorates the stage setting.

#### *Cooperating Accounts*

Each of the cooperating accounts carries the official insignia of The 1937 Gasco Food Institute or the picture of our special representative in his advertising copy. Each of these accounts is furnished with handbills to distribute with purchases to his customers for several days prior to the Institute. Also, each is furnished window and store cards. These posters and handbills are relatively inexpensive. The forms are left standing at the printers, necessitating only changes in time and place in the copy. Usually they are printed for two cities at once.

From this description of cooperative accounts, you can see that the Institute has ceased to be a selfish promotion of the gas company. Instead, it is an event of general community interest. We try to be conservative in promising what we can do for these accounts so



that they will be more than satisfied when the Institute is over. After finishing a third of our schedule, the only complaints to reach us came from accounts which were not asked to cooperate. We are giving some serious consideration to this matter before another season is attempted. In mentioning our obligation to cooperating accounts, we want to call attention to the fact that the newspaper has increased its obligation since first reaching an agreement with us. The paper has committed itself not only to the gas company but, also, to the grocer, butcher and baker. In less than one city out of four has it been necessary to run an additional page of advertising because the other paid advertising fell below four pages.

#### Publicity

About 10 days before the Institute opens, the paper breaks its first publicity on the event. All publicity is written by our Advertising Department and set up in proof, newspaper style. Changes in copy for each city are marked in the margin of the reprints. By keeping our copy clear of misstatement or undue praise of ourselves, we find that nearly every paper takes it without editorial revision, and runs it with the headings we suggest for it.

Main exceptions are those papers whose enthusiasm jumps the bounds of our publicity, giving the Institute a bigger play than we had asked.

For about a week before the opening of the Institute, the paper runs teaser ads which we furnish to them. Several days before the first session, we run a large ad announcing the event and explaining the cooperative nature of the Institute. The day before the opening session, the newspaper and the gas company both run large ads and it is on this day that our cooperating accounts run most of their copy. We furnish the paper a publicity layout for the first page of their 1937 Gasco Food Institute Section. Prior to the second and third sessions, both the paper and the gas company again run large ads. Also, the cooperating accounts use up the balance of their contracted space. Heavy news coverage keeps the event before the readers.

Territory served by The Ohio Fuel Gas Company is divided into 10 operating districts. This means an average of four Institutes per district. Prior to the first Institute in each district, a pep meeting is held among all district employees and their families. These meetings are attended by the business promotion manager, the home service director and the advertising manager.

The purpose of the meetings is to inform our entire personnel of the program so that each employee can talk up the Institutes among his friends and neighbors.

With the main promotion of the Institute thus covered, let's look at the physical properties that comprise each unit. The Curtis Company collaborated with our Home Service Department and the gas company architect to design two thoroughly modern all-gas kitchens that could be moved to the various cities. Each unit contains a gas refrigerator and a divided-top gas range which are furnished from our local display floor. Supplementing the gas appliances are back walls, spacious cabinets, work-table space, sink and planning desk. The unit appears to be of permanent construction, though it is comprised of many parts hung on a framework which is easily dismantled. Padded covers protect the separate cabinet units in shipment. The two kitchens differ slightly in arrangements, but radically in color scheme, one being finished in coral and pinkish cream, the other in canary and blue. Linoleum mounted to Masonite slabs completes the color ensemble. Curtains are furnished for such stages as do not have them available. Loud speaker equipment, a wheel for prize drawings,



Typical stage set-up photographed prior to opening the doors of the theatre. Before the audience saw the setting, floral decorations were added to fill the spaces at the sides and the home service representatives donned their proper dress before their appearance

and a large folding sidewalk sign are the remaining physical properties in each unit.

One property man supervises erection and dismantling of both units. Due to the fact that our speaker on the last day's program appears on the program of both units, the sessions start on different days. Usually our first unit starts on Tuesdays and the second one starts on Wednesday, thus enabling our property man to drive back and forth between units, handling shipping, erection and dismantling. Private moving vans are used for shipments, the average haul being about 50 miles.

Invariably a spontaneous applause comes from the audience as the curtains part and the women are given their first view of the modern all-gas kitchen. This brings us to the most important part of the Institute—the program itself.

### *3-Day Program*

Weeks of study produced a three-day program which we believe to be different from any that ever has been presented at a cooking school. Usually a matronly type of woman conducts such lectures. We selected two young ladies, both Home Economics graduates who are wholesomely attractive, with good stage presence and speaking ability. Miss Elizabeth Scatterday is in charge of demonstrations for the first unit, Miss Kathryn Streich for the second. Their assistant is our own home service representative in that particular district. The young ladies are dressed identically throughout the Institute, although their costumes are changed daily. They speak in their natural voices, using lapel microphones and loud speakers to amplify their voices to the proper volume. These same loud speakers are used for announcements and musical recordings at the beginning and end of each session.

The first day's program is known as "Feature Day." Food servings are prepared which make use of practically every feature of the modern gas range. The home service representatives present their demonstrations in a manner that gives the women in the audience, most of whom are older, some credit for knowing certain fundamentals of kitchen practices. They include both our own commercial features and those

of cooperating accounts in such a way as to make them acceptable but not too obvious to the audience. A professional playwright assisted in arranging the speaking lines with these objects in view. On the first day the young ladies wear white uniforms. Printed recipes covering the program are passed to the women as they enter the Institute. All food is prepared on the stage and is displayed before the meeting is ended. Prize drawings, which will be explained later, conclude the first day's session.

### *"Talk of the Town"*

The second day's program is called "The Talk of the Town." This program is designed to interest women who like to entertain their friends in a manner that brings favorable comment. (And what woman doesn't?) The home service representatives wear street dresses, to which they add an apron when the demonstration starts. The entire conversation is in dialogue instead of straight lecture. The plot is that one of them, who is about to be married, drops in at the other's home. She is worried about being able to cook for her new husband. The special representative is the housewife, and she explains to her friend that good working tools are the first step in a job to be well done. This gives opportunity to explain the range and refrigerator. Also, she says that good food products are needed. This is the cue to boost cooperating food accounts. It happens that she is preparing several dishes to be served to friends who are calling that evening. She asks the bride-to-be to help her, and explains the preparation of the servings as the work progresses.

The gas refrigerator comes in for the big attention on the second day. Most of the food for preparing the evening's servings is found in it, and it appears that the dishes are made up from odds and ends, with little expense. Finishing their task in preparing for the party, the ladies discover that it is only half an hour until dinner time. The visitor is persuaded to stay and they both pitch in to get a hurried-up broiled dinner. Again, on the second day, printed recipes are passed as the housewives come in to the meeting. Prize drawings conclude this program.

The third session is known as "Health Day." Three healthful ways of cooking vegetables are demonstrated. It is shown how vegetables may be cooked using a quantity of water, a little water, or the simmer method requiring no water. Likely you know that electric interests advocate the last method because of the slower cooking speed and higher cost for electricity. We attempt to drive this point home in a positive manner without any direct attack on our competitor. While the cooking is in progress, a discussion on food properties of vegetables is given, using varied colored ribbons of different lengths to show the calcium, phosphorus, calories, vitamins and other properties of several vegetables. For this meeting the young ladies wear identical house dresses.

### *Psychologist Speaks*

The demonstration part of the third day's session is shortened to provide for a speaker of unusual type on such a program. We present a psychologist of national repute on family problems. He is Dr. Roy A. Burkhardt, who happens to be the pastor of one of the large Columbus churches. Dr. Burkhardt does not discuss gas and makes little mention of food. His topic deals chiefly with family problems, particularly in homes with children. He tells how to win the confidence of children, how to inform them on the subjects of life and love, how to discourage untruths. Dr. Burkhardt punctuates his message with amusing little incidents that have happened in nearly every home. The women respond—applaud. As the audience leaves the third day's session, they are given a bibliography of book references on Dr. Burkhardt's subject. In many cities visited for the Institute, Dr. Burkhardt appears before a high school assembly or service club, furnished through the courtesy of the gas company.

Some few from without our organization have questioned as to whether our spirit is not a little too altruistic in presenting Dr. Burkhardt, who discusses no phase of gas. If those people were to hear the comments of the women leaving the meeting and were to see the hundreds of letters Dr. Burkhardt receives, they would have no doubts as to the value of the sincerity



which he casts over the whole Institute.

Instead of handing recipe sheets to the women on the third day, all are given a "Homemaker's Recipe File," containing the recipes for three days and a sheet from the gas company's monthly recipe service, obtainable in its offices. This recipe file is made by a French fold of tag paper. It eliminates troublesome binders and is very inexpensive to produce. It can be added to each month and provides for indexing all recipes.

Again prizes are distributed at the

close of the last day, and here it is well to explain how our prizes are handled. As the women enter each session of the Institute, they are given registration cards. In order to validate their tickets on prize drawings, each question on the ticket must be answered. Besides the name and address, the type and age of the range and the refrigerator which the family uses must be given. After the Institute, duplicates are discarded and the cards are turned over to the Sales Department for solicitation. Of course, those hav-

ing the older equipment are the best prospects.

The stub of the ticket is retained by the holder for identification. Ushers collect the tickets near the end of the session and they are put in a cage wheel for drawings. At the end of each meeting the tickets are removed from the wheel. The first two days' tickets are returned to the wheel on the last day, just prior to drawing for the grand prize. In most cities the grocery account is permitted a "Treasure Hunt." When this is done, a certain

(Continued on page 71)

## New Service Ties Up Movies and Gas Equipment

THE Association's Publicity and Advertising Committee has notified all gas companies of the inauguration of a new publicity and advertising service consisting of photographs of motion picture players and gas equipment appearing together in current film productions or specially posed while the productions are being made. Of late, many important films have featured the latest models of gas appliances. Several

other pictures now being made in Hollywood, most of them starring box office headliners, call for the use of modern gas appliances and in some instances of fully equipped gas kitchens.

The purpose of the new photographic service is to make available for gas company use actual scenes and "stills" showing movie stars and modern gas appliances. The first picture offered in the service de-

picted Lillian Rich and Eric Wilton, two popular M-G-M character players in the cast of "After the Thin Man," in an ultra-modern kitchen equipped with two gas ranges. Due to delay in securing approval it was not possible to get this picture out to gas companies in time to take full advantage of the showing in neighborhood houses of "After the Thin Man," but hereafter no delays of this nature are anticipated.

In making the photographic service available to gas companies the Publicity and Advertising Committee agrees, subject to securing the approval of motion picture producers, to supply companies for \$10 a year with one glossy 8" x 10" photograph of each scene or special studio pose released during the next twelve months that gives favorable publicity to gas appliances. The committee cannot, for obvious reasons, guarantee or even predict the number of photographs that will be available for distribution, but advantage will be taken of every opportunity to have stars posed in the presence of the latest models of gas appliances and to include such pictures as part of the service.

In announcing this service to the industry, Henry Obermeyer, Chairman of the Publicity and Advertising Committee, declared:

"Modernity and design of the new gas appliances have become attractive to those making motion pictures. This is important recognition for the gas industry. The motion picture producers are more than willing to do their part. All they ask in return is that gas companies cooperate with local theater managers and actively promote public interest in films which show gas appliances. Any industry that fails to do this cannot blame the producers for exploiting the products of competitors who appreciate to the fullest the great publicity opportunities inherent in motion pictures. The best practical demonstration of your interest and support is your signature to the attached order blank—the first step in a service we hope to broaden if it is properly supported at this initial stage."



Lillian Rich and Eric Walton, players in the Metro-Goldwyn-Mayer production, "After the Thin Man," are shown with two gas ranges used in a scene from that picture

### NEARLY \$10,000 IN CASH PRIZES GOLDEN FAUCET CONTEST

**WHAT** The Golden Faucet Contest is a contest for the sale of automatic gas water heaters. It is a contest for the sale of automatic gas water heaters. It is a contest for the sale of automatic gas water heaters.

**WHO** All members of the Association are eligible to enter. It is a contest for the sale of automatic gas water heaters. It is a contest for the sale of automatic gas water heaters.

**WHY** The contest is being held to promote the sale of automatic gas water heaters. It is a contest for the sale of automatic gas water heaters.

**WHEN** The contest will run from February 1st to September 30th, 1937. It is a contest for the sale of automatic gas water heaters.

**AND HOW** The contest will be held in the form of a sales contest. It is a contest for the sale of automatic gas water heaters.

**ACT NOW! ... SIGN UP! ... DON'T DELAY!**

### HERE IS YOUR STARTING POINT

**REGISTRATION FORM**

**GOLDEN FAUCET AUTOMATIC GAS WATER HEATER SALES CONTEST**

Announcing

**GOLDEN FAUCET CONTEST**

for the sale of  
**AUTOMATIC GAS WATER HEATERS**

February 1st to  
September 30th, 1937

**1,500 CASH PRIZES**

**21 COMPANY AWARDS**

### AND HERE ARE YOUR GOALS...

**No. 1 PRIZE SERIES** 100 cash prizes each month to individual salesmen.

**No. 2 PRIZE SERIES** 10 cash prizes each month to individual salesmen.

**No. 3 PRIZE SERIES** 10 grand cash prizes to individual salesmen.

**No. 4 PRIZE SERIES** 10 grand cash prizes to individual salesmen.

## Planning for Profits in the Golden Faucet Sales Contest

A GOOD start goes a long way toward winning a race, therefore a good name should count for something in a sales contest. The "Golden Faucet" automatic gas water heater sales contest, true to its name, has been planned for profits; profits to the gas company salesmen in cash awards, profits to the gas companies in increased gas sales from water heating, profits to the manufacturers in greater water heater sales. The contest has been officially announced through the release to gas company sales executives throughout the industry of the prospectus illustrated at the top of the page. All that remains is the turning on of the Golden Faucet through wholehearted, enthusiastic cooperation—and results will pour a golden stream into the pockets of the participants.

This contest is the result of an enthusiastic response to the successful campaign conducted last year which pushed the sales of automatic gas water heaters up 55% above the previous year.

By R. E. WILLIAMS

Chairman, Gas Water Heating Committee

Salesmen, sales managers and gas company executives all joined in a widespread demand for another sales contest. It was a remarkable tribute to the skillful planning of last year's water heating committee who pioneered the contest plan in the field of water heater sales.

In planning the Golden Faucet Contest your committee, composed of representatives of the Water Heater Division, Association of Gas Appliance and Equipment Manufacturers and gas company members of the Commercial Section of your Association, spent many weeks reviewing the results of last year's campaign. Comments and suggestions from members of the sponsor organizations, and particularly from last year's contestants were carefully reviewed. Strong—and weak—points in last year's contest were thoughtfully analyzed.

Your Golden Faucet Contest is the result.

The Golden Faucet Campaign consists of two separate contests, coordinated and timed, but conducted independently. In addition to the gas company contest, which is described in this article, a dealer contest is being launched by the Water Heater Division of the Association of Gas Appliance and Equipment Manufacturers. Both activities are made possible by the sponsorship of participating water heater manufacturers, members of the Association of Gas Appliance and Equipment Manufacturers, and the Commercial Section, American Gas Association. The dealer contest will be confined to retail gas water heater dealers. Prizes will consist of valuable articles of merchandise to be awarded for outstanding sales efforts.

Several important innovations have been embodied in the Golden Faucet Contest for gas companies and their salesmen.

### Highlights of the Golden Faucet Contest

1. 1,440 monthly cash prizes and 65 grand cash prizes to gas company salesmen.
2. 21 handsome plaques of merit to gas companies showing highest sales credits.
3. A complete portfolio of sales, advertising, and publicity aids in planning your campaign.
4. A detailed report of the winners and standings to date of salesmen and companies, to be provided each month as soon as possible after tabulation is completed.
5. An illustrated magazine for salesmen, to be issued periodically during the contest.

First, in an effort to encourage general participation, *no registration fee will be required*. Gas companies may be entered by operating divisions, if desired, to stimulate intra-company competition, or the company may be entered as a unit.

Secondly, the contest is directed primarily toward the men on the firing line, the shock troops of your organization—your salesmen. All cash prizes, involving \$17,600 during the 8 months' campaign, will be awarded to gas company salesmen. Each month cash prizes of \$10 will be awarded to 180 salesmen within the seven size divisions (based upon the number of domestic meters served). The prizes in each size division have been allocated with respect to the anticipated number of salesmen to be registered in competition. At the end of the contest 65 grand prizes, ranging from \$100 to \$25 and totalling \$3,200 in all, will be awarded to the salesmen accumulating the highest total points for the 8 months of the contest. In addition to the cash prizes, bronze, silver and gold medals of merit will be awarded to successful salesmen.

Finally, there will be no prescribed period for intensive drives; each gas company may plan its periodic drives to meet local requirements. Gas company awards will consist of attractive plaques of merit to be awarded for best records for the 8 months' contest period. Each participating gas company sales executive is earnestly requested to utilize the monthly cash prize award plan for salesmen to promote a continuous activity throughout the 8-month period. To keep up the enthusiasm of the salesmen, a monthly bulletin will be published containing a report of the monthly winners and standings to date. A snappy tabloid newspaper—the "Gold Digger"—will

feature stories and pictures of leading salesmen, along with methods they use to build sales.

It is of vital importance to the smooth functioning of the campaign that registrations be made promptly. Thus, we shall be in a position to mail, promptly, a comprehensive portfolio of sales and advertising aids to help you in your campaign. This portfolio will include information about last year's successful sales plans compiled from winners in last year's contest. In addition to the sales plans and a list of home service helps, prepared by the Home Service Committee as a result of work in the field, the portfolio will include supplemental direct mail, billboard and other publicity helps, provided through the cooperation of our campaign counsel and others.

#### Direct Mail Aids

Three direct mail pieces will be available to all gas companies. Useful as envelope stuffers to go with letters and bills or as literature to be handed out at the office or by salesmen, all three of these pieces stress the comfort, convenience and economy of automatic gas water heating. For that reason, we urge company executives to use all three of these pieces as a complete campaign directed to every prospect.

Supplementing these direct mail pieces, we are offering a comprehensive book about hot water in the home. This little volume is one that every housewife will welcome. It calls her attention to many novel ways of using hot water to lighten her housework, and supplies helpful charts of temperatures to use for such purposes as washing woollens, rinsing dishes, or cleaning furniture. Its message does not apply specifically to any one type or brand of hot water

heater, but is instead a general treatment of the usefulness, convenience and economy of having hot water always available in abundance.

Another new feature is the series of eight electrotypes which will be available to all gas companies for utilizing the backs of gas bills for sales messages. This idea has never been applied in a national contest; but it has proved highly effective in many local campaigns. Its cost is negligible. It eliminates the bother of preparing special advertisements. And each advertisement in the series has a distinct appeal of its own. Besides their usefulness in gas bill advertising, these electros may be used frequently, at low cost, as spot newspaper ads. Or they may be used in home service bulletins, and in programs of various kinds.

Mats for larger newspaper ads will also be supplied at nominal cost by the Association, together with outdoor posters, window displays, lipstick pads, show cards and car cards. All these materials—unrivalled for catching the interest of the mass market—will be brought to the attention of every executive.

#### M. I. T. Data Used

When prospects have been secured through intelligent use of the foregoing media, we are ready for our factual, convincing test sheets—reports from the laboratories of the Massachusetts Institute of Technology. Used extensively by all salesmen, these test sheets will prove with actual figures the superior economy of gas over competing fuels. In that way, sales will be speedily clinched among the most skeptical prospects.

All this material will be produced in huge quantities, thus making it possible for all gas companies to purchase these sales helps at a fraction of their normal cost. The work is being done by experts, and all the material may be used by any gas company, regardless of its size or location. Additional sales helps may be obtained from manufacturers of the various types of heaters.

That is the essence of this year's Golden Faucet Contest. Sound, tested merchandising plans. A popular contest, with frequent contacts to maintain enthusiasm among salesmen. A complete, yet simple and effective, advertising schedule. And a thorough follow-up policy.



As chairman of your committee, I should like to pay tribute to the members of the Water Heating Committee and the sponsor manufacturers and officers of the Water Heater Division of the Association of Gas Appliance and Equipment Manufacturers, who have contributed so much of time, energy and funds in making this contest possible.

For the success of this contest, I am looking to gas company executives. I need not remind them of the load-building value of automatic gas water heating. Nor is it necessary to point to better business conditions and to competition—telling them that this is a crucial period when gas must push forward boldly and prove the supremacy it desires so much for the future.

We are working together for the promotion of the all-gas home. It is the duty of every one of us to put all his efforts behind automatic gas water heater sales while selling conditions

are at their best. By installing automatic gas water heaters, we will be preparing our customers for more installations of modern gas ranges and gas refrigerators, and also for house heating equipment.

I am looking for greater cooperation this year than we have ever seen before in the gas industry. That is not a personal whim; it is the result of careful observation in this field. And I know that all you company executives, seeing the situation as I see it, will respond heartily.

Let me wish all of you the best of good fortune for your automatic gas water heater sales throughout the Golden Faucet Contest. Let's make this campaign one of the stepping stones to gas supremacy in the future!

"It is what we sell that counts, and not what we could make, given the opportunity."—The Gas Times (London), January 2, 1937.

## Manufacturers To Conduct Gas Water Heating Contest

**A**NATION-WIDE contest for plumbers, with \$12,000 in merchandise prizes for the winners, was announced recently by the Association of Gas Appliance and Equipment Manufacturers as that group prepared to launch its "Golden Faucet Contest for 1937."

According to H. N. Ramsey, chairman of the Gas Water Heater Division of the A.G.A.E.M., the Golden Faucet contest for retail water heater dealers will extend from February 1 to September 30, 1937, with announcement of awards scheduled for November 1.

Seven geographical districts, comprising the entire United States, have been designed for this contest. They are: (1) Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; (2) New York, New Jersey, Pennsylvania, Delaware, District of Columbia, Maryland; (3) Florida, Georgia, North Carolina, South Carolina, Virginia, Tennessee, Alabama, Mississippi, Arkansas; (4) California, Arizona, New Mexico, Texas, Oklahoma, Louisiana; (5) Montana, Wyoming, Oregon, Washington, Nevada, Idaho, Utah, Colorado; (6) Missouri, Nebraska, Iowa, Kansas, Minnesota, North Dakota, South Dakota; (7) Wisconsin, Illinois, Ohio, Kentucky, Indiana, West Virginia, Michigan.

In each of these districts, a complete set of ten prizes will be awarded. Automobiles are the first awards, followed by radios, car

radios, office furniture, refrigerators, sets of silver, guns, watches and traveling bags.

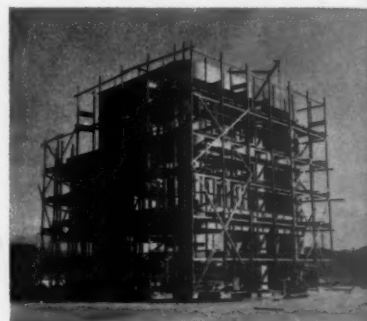
According to the contest chairman, duplicate prizes will be awarded in case of ties.

Rules for the contest are simple. Automatic storage and instantaneous, and conversion gas water heaters will carry a contest tag worth one point for an automatic heater; one-half point for a conversion heater.

To register for the contest, dealers have only to send in one tag. From then until the end of the campaign they will receive monthly folders, offering advertising and merchandising plans to stimulate their sales.

The following gas water heater manufacturers have underwritten the cost of this contest. They are: American Gas Products Corporation, Autogas Corporation, The Cleveland Heater Company, Crane Company-Premier-Heater Division, EverHot Heater Company, Gas & Electric Heater Company, Gerstein-Cooper Company-Gas Equipment Division, Handley Brown Heater Company, The Hotstream Heater Company, Hynes and Cox Electric Corporation, Lawson Manufacturing Company, Lovekin Water Heater Company, Pittsburg Water Heater Corporation, Ruud Manufacturing Company, The Sands Manufacturing Company, United American Bosch Corporation, Welsbach Company, Whitehead Metal Products Company, John Wood Manufacturing Company.

## "Movie" Gas Building in Embryo



*Gas company office building under construction*

**T**HE building of a typical American business street is now under way in Hollywood, and the first structure to be erected—and on a choice corner location too—is a gas company office building of classy lines and curves.

The Hollywood producers decided some time ago that a lot of money could be saved if they were to discard their individual streets and build a new one which all could use for photographing scenes depicting street action. An invitation was extended to the American Gas Association to sponsor the erection of a gas company office building, and the Association's Executive Board promptly gave its approval.

When completed, the gas building will have the latest models of gas appliances in the show windows. Some effective use will be made of the slogans of the National Advertising Program, and members of the progressive gas fraternity in Los Angeles may be counted on to see that other noteworthy features are added.

Perhaps in the not distant future millions of movie fans will be delighted to see boy meet girl in front of the gas company building. If some gorgeous models of gas appliances appear in the background, or if those familiar words "Modernize Your Home with Gas" happen to get into the picture—well, that's all right too.

## Exhibit at Natural Gas Convention

**I**N connection with the annual convention of the Natural Gas Department of the American Gas Association which will be held in the new municipal auditorium at Kansas City, May 10-14, the Association of Gas Appliance and Equipment Manufacturers will conduct an exhibition of gas appliances and equipment. Plans are being made by the manufacturers to display equipment of special interest to the natural gas industry. The convention is expected to be one of the largest and most enthusiastic yet held.

# A Glance at the Rate Situation



A. I. Phillips

THE province of the general report of the Rate Structure Committee is to outline to the gas industry the trends in rate making as they come about through developments in the art and through changes in existing and probable future conditions. These developments and changes give rise to specific problems which are assigned to subcommittees or individuals for intensive study. Their reports form, and have always formed, an invaluable part of the service rendered the industry by this committee. They should be viewed as related pieces of research which in any year bear on the problems of the times. The general report ties these into a coordinated unit, and shows the purpose of each and its significance with respect to the situation as a whole.

Of necessity, the early efforts of this committee were directed to a study of fundamentals. Sound methods of cost analysis were developed, load characteristics of various types of business were investigated; and as a result, its reports undoubtedly have had a profound influence in helping the industry to acquire a clearer conception of the basic factors in rate making. Customer costs came to be reflected in residential rates; demand type industrial rates made their appearance; incremental costs formed the basis for various rates for additional consumption such as those for house heating; and in 15 years the straight line meter rate has virtually disappeared. This committee reiterates its adherence to the fundamental principles outlined in its past reports and advocates their general recognition by gas companies and regulating authorities. It urges that they be considered and intelli-

By ALFRED I. PHILLIPS

Chairman, Rate Structure Committee

gently applied in the fixing of every rate.

Two basic factors must be constantly kept in mind by the rate engineer,—cost of service and value of service. Because of existing conditions the early work of this committee was directed largely toward a study of cost of service. The structure of rates adopted reflected that trend of thought. In recent years competition has been assuming a place of constantly greater importance, particularly in the resi-

In this general report of the Rate Structure Committee, which was presented at the annual A. G. A. convention last October, Mr. Phillips points out the increased importance of competition in the field of rate making. Particularly in residential business, rate engineers must give more and more attention, not only to cost of service, but also to value of service, as measured by such intangibles as comfort, convenience, modernity, and personal habits of individuals. The report presented here is an able discussion of present-day rate trends. The complete report of the committee may be obtained from Association headquarters.

dential field. Hence value of service is rapidly assuming a more dominant position in rate making. This committee does not, and never has suggested the one factor to the exclusion of the other. It does urge that there be a thorough analysis to show the cost of serving the business, and a study and survey to show the value of the service, including convenience and intangibles, compared with that of competing fuels. Thereafter sound judgment must dictate the rate which will best meet the conditions.

Fundamentally the problem does not change. Rate schedules should be designed to hold each class of existing business, secure new classes of consumption, be just and equitable to the customers, promote good public relations and yield the company a fair return. No set formula can be designed to attain these objectives. Strict adherence to the results of theoretical cost analysis will not do so. Competi-

tion and the trend of competition in the particular territory must be given at least equal consideration. As already stated the final decision should be based on judgment supported by a full knowledge of all conditions.

Competition between gas and other fuels has become keener during the past year, and promises to be even more keen in the future. The problem of meeting this is of paramount importance; and the committee has recently devoted almost its entire attention to it.

## Class Rates

The various applications of gas are confronted with different degrees of competition. Each one requires a different price level in order to hold existing business and gain new business. The majority of companies have adopted separate schedules for commercial and industrial business to meet the conditions in those fields. Many have special house heating rates based largely

on incremental costs and competitive conditions. Rates for water heating and for residential service with various combinations of appliances have come into use in certain places. One large company, for example, allows a 15% discount on the amount of the regular monthly billing between \$2 and \$25 to all customers who use a gas range, a gas-fired water heater and whose major space heating requirements are supplied by gas heating equipment. These various optional or class rates are designed primarily to meet competition directly in the particular field to which they pertain.

The desirability of further extension and more general use of class rates, particularly in the residential field, has been given serious consideration by this committee. A subcommittee has prepared an unbiased, painstaking and able report on the advantages and disadvantages of class rates. It discusses the conditions under which they may

be and under which they may not be used to advantage, and also the legal justification for them. Its report merits careful study.

In general, this committee believes that class rates are valuable tools in meeting competition directly and specifically in the particular field they are intended to cover. It believes that the use of such rates should be extended and enlarged, and urges every gas company to give serious thought to their usefulness in its territory. On the other hand this committee recognizes the problems accompanying their introduction and recommends against their indiscriminate adoption. As in all rate matters, the final decision should rest on sound judgment and mature consideration of the local conditions to be met.

#### *Relation of Rates to Domestic Gas Sales*

Competition in the industrial and commercial fields is based on relatively definite and measurable factors such as cost of fuel, efficiency of operation, quality of product and the like. The fuel that will do the work best and at the lowest cost will ultimately be adopted.

Competition for residential business is far more complex. In addition to the relative costs of other fuels are their convenience, cleanliness, the customer's ability to purchase equipment for their use and the comforts, prejudices and personal habits of the individuals. Consciously, or subconsciously, the residential consumer measures the value of gas service by his own appreciation of its quality, comfort, convenience, healthfulness and modernity and compares these factors with those offered by competing fuels, as well as the relative costs of the service and of the equipment required.

The effect of cost of residential gas service on the quantity that will be used is a matter of vital concern to every company. If convenience, modernity and other intangibles are of more importance than cost, then money should be spent on promotion rather than given up through fruitless rate reductions aimed to meet a price competition which is largely non-existent. On the other hand, if the cost of the service is the important factor at what rate level is the largest profitable vol-

ume of business likely to be secured and thus yield the maximum return on company's investment?

These questions, which go to the very heart of residential rate making under competitive conditions, were delegated to a subcommittee. Its study contains data and information on trends of usage that should be of immediate practical value to almost every gas company.

The study of this subcommittee shows clearly that residential cooking is not greatly affected by cost of service. On the other hand, water heating consumption is substantially affected by cost, while for house heating, cost is the dominant factor.

Detailed knowledge of trends such as these should enable company managements to approach the question of domestic rate adjustments and rate structures with increased confidence, and also aid in developing the extent and type of promotional activity for each class of residential business.

#### *Small Thermal Unit for Gas*

From time to time in recent years it has been urged that the gas industry adopt a thermal unit of measurement equal or approximately equal to the electrical kilowatt hour. The prospective advantage would be that the cost of gas and electric energy would then be directly comparable and evident.

The fact that the commonly used gas billing units—the thousand cubic feet, the hundred cubic feet and the therm—are all larger from an energy standpoint than the electrical kilowatt hour, and hence generally more expensive, presents some competitive disadvantages. Consideration of various units which might be adopted to meet this situation, together with the experience in other countries with such units, is contained in a special report.

With few exceptions therm rates in the United States have been adopted to assist in preventing public misunderstanding and in minimizing the initial loss in revenue when natural or high heating value mixed gas has replaced manufactured gas. As a help in meeting residential competition they are as yet unproven. They have undoubted theoretical advantages. On the other hand, any change in the unit of measure should be undertaken only after due consideration of its effect on

public relations. This committee makes no recommendation for or against the adoption of a small thermal unit of measurement. Such a unit is not a panacea for our competitive problems. It may prove helpful in meeting them where effort is made to stress the low cost of the electrical unit to the detriment of gas. The advantages and disadvantages of adopting such a unit should be weighed by executive management and the final decision based on the local conditions to be met.

#### *Price Levels*

Costs of doing business are necessarily reflected in rates; and this committee has sought information from its membership intended to show whether present cost levels are a serious bar to increased sales and where there is room for improvement in existing rate forms. While there is divergence, the consensus of opinion seems to be:

- (1) Present price levels are not generally a serious bar to increased residential sales.
- (2) Thorough surveys and analyses should be made of customers, of appliances in use, of prospective business and of the steps necessary to secure it.
- (3) Class rates or special rate forms of highly promotional character should be more widely adopted.

In some manufactured gas companies price levels do present a serious problem, particularly in the acquisition of water heating, house heating and industrial business. This committee points to the advisability of concentrating attention on those items which are reflected in incremental costs, since those affect not only the cost of serving present consumption but also to an even greater degree the acquisition of new business on an advantageous basis.

#### *Special Rate Forms*

Objective rates and sliding scale rate plans have received continuing attention by this committee; and a factual report describing each one adopted by a gas company in this country has been separately published.

It is of more than passing interest that just 20 years ago the Consolidated



Gas Electric Light and Power Company of Baltimore adopted gas rate schedules embodying many of the features of present day objective rates. For over 13 years they remained in effect. Finally the objective features were eliminated in a general revision and simplification of schedules.

Basically the objective type of rate is a vehicle for effecting a change to a more favorable competitive position. It is intended to transfer the users of gas from their existing level of use and from existing rates to a new and higher level of use at new and lower rates appropriate to the greater consumption, at the same time protecting the financial integrity of the company both during and after the transfer period.

About 20 gas companies in the United States have thus far adopted rates of the objective type. The committee has considered it inadvisable to collect and present data on the operation of these rates until they have been in use for a slightly longer period. However, general reports indicate that they have proved successful in building up gas sales and that they are in fact one of the most promotional rate forms ever devised.

### *Sliding Scale Rates*

Rates of the sliding scale type have been adopted in Washington, D. C., and Detroit, Michigan, during the past year. Their purpose is automatically to insure to the public a fair price for gas consistent with the cost of the service and at the same time give the company a fair return on its investment. In this way politics and rate cases are sought to be eliminated.

Sliding scale rates originated in Great Britain many years ago but, in their original form, it was impossible to adopt promotional types of schedules. They also failed to provide for changes in general price levels. These defects have been remedied in the Washington and Detroit plans. Similar plans may well be considered elsewhere, especially where public officials and company managements are seeking a fair and permanent solution to a rate controversy.

The use of class rates, objective rates and other schedules designed to meet present day competition has oc-

asionally led to the charge of discrimination. If such claims were sound, then every gas rate, every electric rate, in fact, every utility rate ever established has been in a measure discriminatory. There is a wealth of misunderstanding on this subject. It is only requisite that there be no *unjust discrimination* such as granting a rate to one customer and refusing it to another whose appliances and conditions of use are identical.

Cost of service is not recognized as a sound basis for a plea of discrimination. Railroad freight rates, for example, are regularly based, not on cost of handling the particular commodity, but on the value of the service to the customer. The propriety and wisdom in the public interest of acquiring gas business that cannot bear its full pro rata share of the cost but can stand full increment cost and some contribution to earnings has been accepted by regulatory commissions as an established principle.

It would seem regulatory authorities have been less conservative than many companies in differentiating between just and unjust discrimination. A broad interpretation is essential in the public interest under present competitive conditions.

### *Rates and Sales*

The purpose of rates and rate schedules is to enable sales of gas to be made most effectively and to provide the needed revenue for the company. Rates of themselves do not produce sales. They merely permit them to be made. They are tools constructed by the rate engineer and turned over to the new business department and the commercial department for use. Regardless of how well they may be constructed they will accomplish nothing unless they are skilfully used; but skill in use will be of little avail if they are poorly constructed.

Particularly in these days of keen competition, rates must not only adhere to sound principles, but they must be expressed in a form which will be acceptable or even attractive to the public. For example, the two part residential rate has been unpopular in some places, whereas a rate with high first block, identical in effect, has proved acceptable.

The rate engineer of today must be a rate psychologist who can put his work in a form which will help the salesman to cope most effectively with those intangible elements which are so important in present day residential competition. This involves not only the form of the rate itself, but the manner of its presentation to the public. Often the rate itself should be kept in the background and the cost of the particular classes of service stressed. Rate psychology has been responsible for the development of many of the special rate plans, such as the objective rate, and has had much to do with the results of their operation.

### *Conclusion*

Rate making is not an exact science. No formula or set of rules can be devised which will solve the problem of constructing the best rate schedule to fit a particular set of conditions. The answer should rather be sought:

Through a thorough and searching survey of all the conditions to be met,

Through the application of sound fundamental principles to those conditions, and finally,

Through the exercise of well-considered executive judgment in balancing the various factors.

The conditions surrounding the use of gas, the purposes for which it is used and the competition from other fuels, change from time to time. Rates and rate forms must change to meet the new conditions. Thus the work of the Rate Structure Committee is never complete. There are always new rate problems to be solved; new rate forms must be examined in the light of performance, and the relative importance of old principles must be re-weighed at frequent intervals.

At present the gas industry is facing an era of competition. During the past few years this has become increasingly keen. There is no branch of our business that is free from it. To devise rates that will be most effective in helping to meet competition is the outstanding problem of the rate engineer today.

It is the considered opinion of this committee that in most instances rate schedules can be devised which should

be successful in meeting competition in the residential and commercial fields and in securing a substantial volume of industrial business. Such rate schedules should be designed as far as practicable to meet directly the local competition in each particular line of business. Class rates are peculiarly adapted to this purpose. Hence this committee recommends that the gas industry give serious consideration to their more general adoption.

Comfort and convenience must be recognized as vital factors in the competition for residential business. For some classes of business they are of as much importance as price. The type of rate schedule adopted and the activities of the sales department should depend largely on the relative influence of price and of the intangible factors. There is urgent need for more information on this subject than is now available, but what is available should be put to practical use.

Objective type rates, where adopted by gas companies, have generally been successful in helping to build up sales. They are a valuable competitive weapon and deserve more consideration than they have yet received from members of our industry.

The various rate schedules of a company should yield a fair return on the fair value of the property but individual schedules may properly carry different proportions of the overhead where competitive conditions make this necessary or even advisable.

The form of the rate is important. Care should be taken to make it attractive as possible to the public. Much of the success of the objective rate has been due to its form which appealed to both the public and the salesmen.

The purpose of rates is threefold:

- (1) To provide an adequate revenue.
- (2) To secure the maximum amount of profitable business.
- (3) To promote good public relations.

Every set of rate schedules should be examined with these basic principles in mind.

Finally, it should be emphasized that proper rates alone will not produce sales; salesmanship and customer satisfaction are also essential.

## ASA Reviews Work; Re-Elects D. D. Barnum President



Dana D. Barnum

DANA D. BARNUM, president of the Boston Consolidated Gas Company, Boston, Mass., and past president, American Gas Association, was re-elected president of the American Standards Association at the annual meeting in New York, December 9. Edmund A. Prentis

of the firm of Spencer, White and Prentis, Inc., was re-elected vice-president.

Mr. Barnum has served on the Board of Directors of the American Standards Association since 1933 as a representative of the American Gas Association.

Founded in 1918 by five major engineering societies, the ASA today has 56 national groups—government, trade associations, including the American Gas Association, and technical societies. Five hundred national organizations are participating in its work. A total of 357 national standards have already been approved by the ASA, including those for gas appliances tested by the American Gas Association Laboratories. While the association started by standardizing mechanical parts, it is now in the field of regulatory standards and codes for protecting life and property in which it has done notable work and received wide acceptance by industry, governmental bureaus and regulatory bodies.

Standardization is one of the many fields in which government and industry can cooperate to the end of increasing production, reducing costs and eliminating waste. President Barnum stated in his annual report: "Intelligent and efficient administra-

tion by regulatory bodies of standards and codes drafted in cooperation with industry, in accordance with experience and knowledge of the underlying principles of production, distribution and utilization, supplement and make possible what neither industry nor government can accomplish alone," he said.

George B. Cortelyou, first president of the American Gas Association, retired head of the Consolidated Gas Company of New York, and former Secretary of the Treasury and Postmaster General, who is chairman of the ASA Advisory Committee, described the success of the ASA as impressive. "There are," he said, "enthusiasts who would standardize everything in sight, but to me your success has been measured by the way you standardized those things which should be standardized. That is what you are doing and will, I hope, continue to do. There should be nothing in the nature of regimentation in standardization."

A complete report of the ASA annual meeting appears in the December issue of "Industrial Standardization and Commercial Standards Monthly," official ASA publication. This magazine, which has published many important articles on standardization in the past, adopted a new and attractive cover design for its December number. It maintains its previous high standard of editorial content.

## Gas Holders Adapted to Disposal Plants

ADAPTATION of gas holders in connection with sewage disposal plants which are being required in populous communities for the maintenance of sanitary conditions, is discussed by Herbert W. Alrich, Consolidated Edison Company of New York, in an authoritative article on "Operation of Holders for Sewage Gas" in *Municipal Sanitation* for December.

Disposal plants yield large quantities of a combustible gas which has a high value as a fuel and may be used for power and heating purposes. Until recently, Mr. Alrich states in his article, all of the gas holders constructed for the storage of sewage gas have been of small size. The new sewage disposal plant of the City of New York, at Coney Island, however, is equipped with eight single lift holders of the water-sealed type, each having a capacity of twenty-five thousand cubic feet, or a total of gas storage of two hundred thousand cubic feet.

The largest gas holder now in such service is the two hundred thousand cubic foot holder erected at the Baltimore sewage disposal plant in 1935, which is illustrated in Mr. Alrich's article. This is of the center post, waterless design and is provided with the M.A.N. floating tar seal.

### A Correction from Paris

Attention has been called by E. Vincent of "Chimie et Industrie," Paris, to an incomplete reference cited in Dr. Carl G. Deuber's paper on "Effects on Trees of an Illuminating Gas in the Soil" which was reprinted in the *A. G. A. Monthly* for December. Reference to an article by M. J. Laissus and M. R. Heim, entitled "Contribution à l'étude de l'influence du gaz d'éclairage sur la végétation," stated that it was published in "Journal des Usines à Gaz." While this is true, the article was first published in the March 1935 issue of "Chimie et Industrie" and subsequently reprinted in "Journal des Usines à Gaz" with correct acknowledgment.



Edward Phillips,  
the villain



Joan Barclay,  
leading lady



James Bush,  
leading man



Barbara Bedford,  
home service girl

## A. G. A. Movie Goes into Production

**C**AMERAS have begun to grind on "The House That Jack Built," the motion picture which is being produced in the interests of the American Gas Association. The producing company has gone on location for the opening scenes of the pictures and returns to the International Studios, in Hollywood, early next week.

The story of "The House That Jack Built" was especially designed to tell the romance of the use of gas in an average American home. The plot is cleverly constructed to include both the modernization of an old home, with gas, and the building of a complete,

model house. The latest word in settings have been designed for the use of this A. G. A. motion picture, as may be seen from the accompanying photographs, depicting the reception room of

a large country home in which a weekend party is held, and also the living room of the model house, the entire construction and furnishing of which will be seen in the film.

Prominent in the cast of Hollywood players, are James Bush, whose latest work is the portrayal of Mark Twain in the Paramount production of that name, Joan Barclay, contract player from Warner Brothers, Barbara Bedford, M-G-M contract player, Edward Phillips, Universal player, Connie Bergen, Bobby Jarvis, Broadway stage comedian, and others.

"The House That Jack

(Continued on page 79)



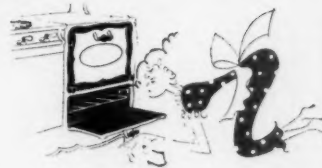
The reception room of a large country home and (right) the living room of the model house, the entire construction and furnishing of which will be seen in the A. G. A. film. Above is shown the first scene being shot for "The House That Jack Built"

# Let's Talk Gas Ranges



WHAT DO THEY OFFER YOU IN CONVENIENT  
DEPENDABLE, EFFICIENT COOKING SERVICE?

by **CONSTANCE HOLLAND**



A FRIEND of mine has a curious antipathy to "Home on the Range." Says it always reminds her of the long hours she spends fussing over her kitchen range, an old-fashioned affair with an oven as temperamental as a movie queen. "Leave it alone with food for more than five minutes," she says, "and heaven only knows what will happen."

Are you, too, struggling with an unsightly, inefficient old relic that tries your patience, disturbs your esthetic self and keeps you "home on the range" while your friends go gaily off to parties and club meetings?

Then why not do something about it? Why not put at the top of your list of "simply-must-have's" for 1937 a brand-new, efficient, good-looking range?

## High in Eye Appeal

Because we wanted to bring you information about the new gas ranges we made a special trip to the Gas Association convention at Atlantic City, talked with gas-range manufacturers, saw the new ranges—and here is the news. They certainly hit a new high in eye appeal. They are trim and slick and clean-looking; easy to keep clean. As true of ranges as of people, however, is the old adage "handsome is as handsome does." What then do the new ranges offer in mechanical improvements, and what will they do for you?

Is the broiler on your range so low that you must bend and stoop and all but stand on your head every time you broil the breakfast bacon? Broilers on the new ranges are designed for convenience. Many are waist-high, sometimes above, sometimes on the same level as the oven. The broiler in our picture swings out on the door, at a

The heading reproduced above is taken directly from the February issue of "Delineator" from which this article is reprinted. Closeup illustrations of a modern gas range used in the original article could not be secured in time for publication in the "Monthly." Reprints of the original article may be secured from A. G. A. headquarters at  $\frac{3}{4}$ ¢ each delivered.

convenient height, and away from the flame. See how easy it is to turn the chops. No stooping; no burned fingers.

Another range has a tricky broiler that works like a piano stool. You swing it around, raising or lowering it as you wish, instead of moving it into different slots.

## Burners More Efficient

When broiler and oven are independent of each other, each burner is designed for its own cooking job. Broiler burners are more efficient; they cook faster. Heat is evenly distributed over the entire surface. Fill the rack to capacity, and every bit of food is evenly browned.

New radiant broilers are seen, using ceramics or some other medium around the burner. Penetrating radiant heat, plus the gas flame, saves time and fuel.

Oven burners are faster, which means less time for pre-heating. You can get a 500° F. oven in less than ten minutes. Formerly you needed fifteen to twenty.

On the other hand, so flexible are these new oven burners that they are capable of maintaining the very low temperatures needed for fruit cakes, and other foods requiring long slow cooking. If you have to prop your oven door open in an effort to keep a slow oven going. I do not need to tell

you what a great advantage this is.

Reliable oven controls take the guesswork out of cooking, and make oven-watching a thing of the past. No need to hang around the kitchen all afternoon, peeking into the oven every few minutes to see if everything is going along all right. Everything will be all right if your oven has a dependable oven control.

If your range is poorly insulated, cooking in warm weather is apt to be unbearable, because of the heat which escapes into the kitchen. A well-insulated range means a cooler kitchen, a lower fuel bill.

The new top burners are more efficient; they cook faster; there is less wasted heat and more even distribution of heat over the bottom of the utensil. They are so designed that the holes do not become clogged with food if a saucepan accidentally boils over. Some ranges have removable burner heads for easier cleaning.

Not so long ago, burners and grates were made of cast iron, which rusted and turned an unsightly brown after a short period of use. Today they are made of good vitreous enamel, aluminum alloy or aluminum-plated iron. They look grand when they are new, and they keep their good looks to a ripe old age.

## Work Surfaces Provided

Top burners are spaced to accommodate large utensils without crowding. Ample work surfaces are provided. Divided top ranges may have two burners on either side of a work space, or four burners along the back and the work space along the front. Another arrangement centers the burners, with work surfaces on either side. It's so convenient to "dish up" a meal

(Continued on page 78)

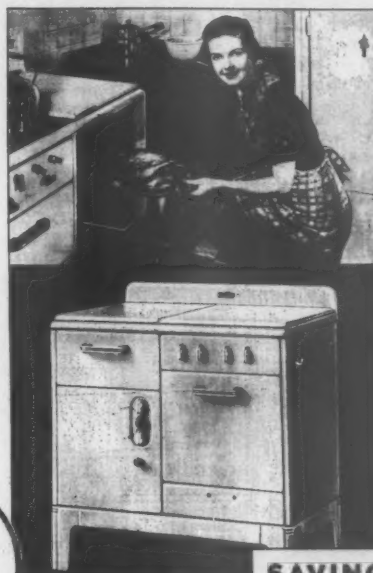


This year I can really enjoy Thanksgiving dinner thanks to my-

## Modern ESTATE GAS RANGE

On Thanksgiving Day... when the burden on the cook is greatest... you'll appreciate one of these Modern Estate Gas Ranges in your kitchen. They actually make cooking easy! Over heat control, for instance, makes baking failures almost impossible, eliminates over-arching and saves countless hours in the kitchen. The new high-speed grill seals goodness in meat and broils in about half the time. Improved top burners (unusually lighted!) give constant speed and the exact shade of heat you need.

The Estate Gas Range of today has many other startling improvements, ones which will make the Thanksgiving dinner and every other meal a real pleasure to prepare! See the new Estate at our showrooms today... while special Fall sale prices are still in effect.



**SAVINGS  
UP TO 26%  
ON MODERN ESTATE  
GAS RANGES  
LIMITED TIME SALE**

There's nothing like GAS for...

**HEATING**  
Produce warm rooms quickly and efficiently. Gas ranges are the most efficient heaters for the home.

**BAKING**  
Baking is made easy by the automatic range of the Estate Gas Range. The new high-speed grill seals goodness in meat and broils in about half the time.

**BROILING**  
Broiling is made easy by the automatic range of the Estate Gas Range. The new high-speed grill seals goodness in meat and broils in about half the time.

**BOILING**  
Boiling is made easy by the automatic range of the Estate Gas Range. The new high-speed grill seals goodness in meat and broils in about half the time.



As Low as  
**\$5 DOWN**  
EASY MONTHLY  
TERMS



## with a GLENWOOD GAS Range

The GLENWOOD GAS RANGE is so designed that it takes fullest advantage of the most perfect of cooking fuels—gas. There are some of the GLENWOOD high speed AUTOMATIC OVER HEAT CONTROLS—Range heat at the required cooking temperature with accuracy.

**UNUSUAL TOP BURNERS**—Gas is the fastest of cooking fuels. These new Speedster burners combine this fact with greater economy.

**60 CIRCULAR OVERHEAT**—This feature is up and down motion of the heat that is responsible for the remarkable uniformity in Glenwood oven temperatures.

There are but a few of the outstanding GLENWOOD features. No wonder it's always smooth sailing for women who cook with GLENWOOD ranges.

Stop in and see the models on display at our showrooms.

**COOKING**  
The most perfect of cooking fuels—gas. There are some of the GLENWOOD high speed AUTOMATIC OVER HEAT CONTROLS—Range heat at the required cooking temperature with accuracy.

**REFRIGERATION**  
The most perfect of cooking fuels—gas. There are some of the GLENWOOD high speed AUTOMATIC OVER HEAT CONTROLS—Range heat at the required cooking temperature with accuracy.

**WATER HEATING**  
The most perfect of cooking fuels—gas. There are some of the GLENWOOD high speed AUTOMATIC OVER HEAT CONTROLS—Range heat at the required cooking temperature with accuracy.

**WASHING**  
The most perfect of cooking fuels—gas. There are some of the GLENWOOD high speed AUTOMATIC OVER HEAT CONTROLS—Range heat at the required cooking temperature with accuracy.

Rochester Gas & Electric Corp.  
80 East Avenue  
Main 2446

WASHINGTON GAS LIGHT COMPANY • 411 Tenth Street N. W. • Phone District 8500

## There's Nothing like GAS for cooking YOUR THANKSGIVING DINNER

... but you CAN DO IT SO MUCH BETTER AND  
MORE CONVENIENTLY with a MODERN GAS RANGE!

The 1937 Providence Economy GAS Range has many new features. It's the most modern range of GAS in the home today. It's the most convenient range of GAS in the home today. It's the most economical range of GAS in the home today.

**NEW WELL ECONOMY COOKER**  
**NEW ECONOMY BURNERS**  
**NEW ECONOMY TOP BURNERS**  
**NEW ECONOMY OVEN**  
**NEW ECONOMY GRILL**  
**NEW ECONOMY BROILER**  
**NEW ECONOMY WARMER**  
**NEW ECONOMY WARMER**  
**NEW ECONOMY WARMER**

**PROVIDENCE GAS COMPANY**  
The 1937 Providence Economy GAS Range is the most modern range of GAS in the home today. It's the most convenient range of GAS in the home today. It's the most economical range of GAS in the home today.



## Modern Gas Cookery

new time — new vitamins — new flavor



CONNECTION TO YOUR POWER

See how easy it is to connect your gas range to your power supply.

See how easy it is to connect your gas range to your power supply.

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Above are shown only a few samples of newspaper ads tying in with the national advertising program. The volume of tie-in advertising is growing as the program reaches its full stride for the first year. If you have not sent in samples of your tie-in ads, please be sure to do so. Space will automatically prevent reproducing all of them in the pages of this magazine, but the ads will serve many other useful ends.

# New Bulletin Issued on Domestic Gas Range Research

**L**AST month a technical bulletin was published and distributed with the approval of the American Gas Association's Executive Board to member gas company and gas range manufacturer executives. This publication is a summary of results set forth in seven previous progress reports on the Association's domestic gas range research and covers somewhat more than a year's work. While the bulletin contains 85 pages of technical material, it

**By F. J. RUTLEDGE**

**Chairman, Committee on Domestic Gas Research**

procedure was prepared and reviewed by the committee. On this committee are gas company and gas range manufacturer representatives, among whom are engineers who are widely recognized throughout our industry as experts along utilization lines. The policy

was followed of confining this research to the attainment of fundamental information from which interested manufacturers could secure basic engineering data that might be applicable in bringing about desired improvements in gas cooking. This has stimulated applied research by many appliance manufacturers.

## *Manufacturers Study Work*

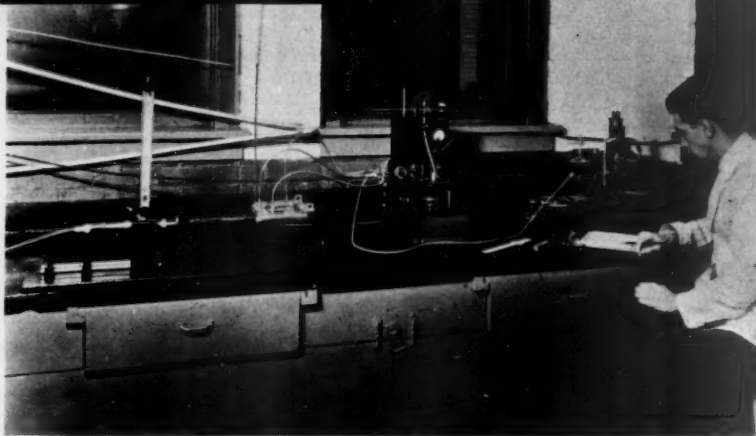
In order that the results of this research might be made effective as rapidly as practical, manufacturers of approved gas ranges were invited by the committee in June of last year and thereafter at approximately three-month intervals, to send their engineers to the Association's Cleveland Laboratory for the purpose of examining detailed reports. During the more than a year that this study has been under way, roughly 80 per cent of these range manufacturers have sent representatives to Cleveland for the purpose of securing this information at least once, and in some instances as many as eight different times.



*Studying effect of port area, port size and primary air-gas ratios on maximum safe gas rates*

was impossible to include all of the detailed data in a report that was designed primarily for such wide distribution. Detailed supporting data can be furnished to gas range manufacturer members and gas company members upon application to the Laboratories.

The extensive research work which forms the basis for this bulletin was conducted at the Association's Cleveland Laboratory under the supervision of the Committee on Domestic Gas Research. Before laboratory work began a complete outline of proposed



*Apparatus for investigating fundamentals of burner design*



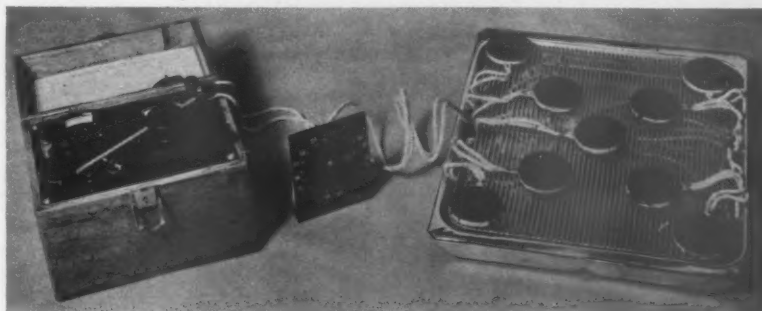
Discussing briefly some of the research activities set forth at considerable length in the bulletin, which is known as Bulletin No. 7, we might consider first some of the more important aspects relating to the improvement of gas range top burner performance. It was felt that the more nearly such units could be made to simulate a furnace or any general type of complete gas burning unit, within practical limits of course, the more efficient they would be. In other words, it was reasoned that if effective means could be employed to control quantities of excess air, eliminate metal to metal contacts where desirable, streamline burner grates and other parts which might interfere with the normal processes of heat transfer to the desired heat absorbing surfaces, top burners could be made more efficient.

It was found, for example, that by decreasing the metal to metal contact between burner grates and utensils, the effectiveness of heat transfer could be greatly improved. Stream-lining grates also added still further to efficiency and the proper design of aeration bowls and center openings in burners in such a manner as to bring about a substantial reduction in the quantity of excess air passing through the flame, proved to be still more effective. In many instances improvements of about 20 per cent in efficiency were demon-

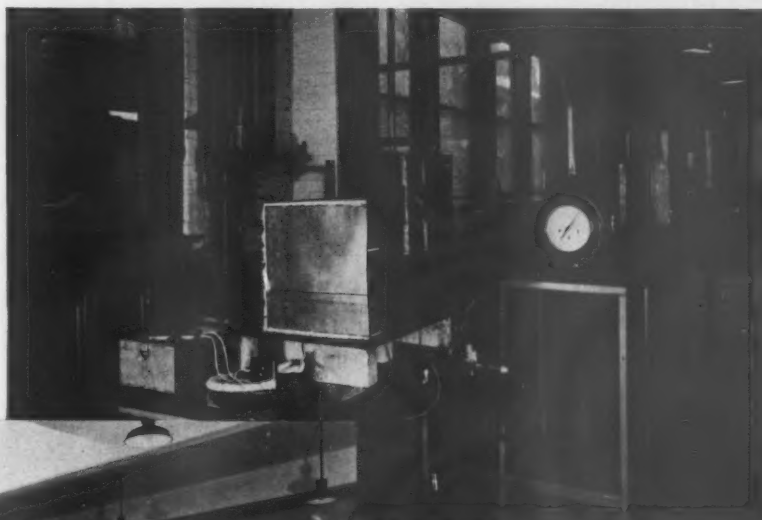
strated without any significant structural changes.

One of the most important points brought out in the bulletin was the fact that a review of contemporary gas range combination oven and broiler

burner design indicated that many burners of this type were greatly overported which prevented necessary flexible operation. Fortunately, quite a number of manufacturers are providing their 1937 models with more flexible



*Arrangement of thermocouples for determining broiler temperatures*

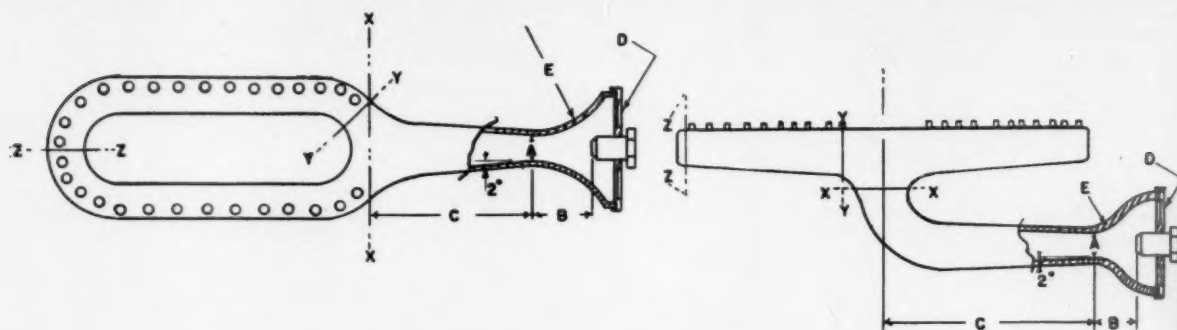


*Some of the apparatus for determining effects of various thicknesses, densities and types of insulation on oven preheating inputs, preheating speeds and maintaining rates*



*Studying performance characteristics of modern gas ranges*

oven burner equipment as recommended during the program of this research. Tests indicate that burners designed along these lines will not only heat up ovens to 500 degrees in considerably less time than is now required on the average, but are also flexible enough to maintain oven temperatures from 100 to 150 degrees lower than usual without trouble from flashback or extinction of oven burner flames. This means that canning operations, and in fact any other low temperature



- (A) THROAT: Area—0.40 to 0.45 times total port area; DIAMETER— $0.74 \sqrt{\text{total port area}}$
- (B) DISTANCE THROAT TO ORIFICE—2 times throat diameter.
- (C) DISTANCE THROAT TO BURNER HEAD—not less than 6 times throat diameter.
- (D) AREA OF PRIMARY AIR OPENING IN MIXER FACE—at least 1.25 times total port area, or, preferably, adequate to keep primary air velocity at 5 feet per second or less (area on this basis =  $\frac{R}{12,500}$  sq.in., where "R" = input rate in B.t.u. per hour).
- (E) RADIUS OF MIXER HEAD—approximately 3 inches, requirements of dimensions B and D to be met for mixer head shapes shown and for other contours.
- CROSS SECTIONAL AREA OF BURNER HEAD (INTERNAL)—at any section, approximately 2 times area of ports remaining to be fed.

Note: Most of Foregoing Data from National Bureau of Standards Circular No. 394, and Other Sources.

#### SAMPLE CALCULATIONS

ASSUME BURNER IS TO HAVE 80 NO. 38 D.M.S. PORTS AND A NOMINAL INPUT RATE OF 19,500 B.T.U. PER HOUR

Total Port Area =  $80 \times 0.00809 = 0.647$  sq.in. Throat Area =  $0.647 \times 0.43 = 0.278$  sq.in.

Throat Diameter =  $0.74 \times \sqrt{0.647} = 0.595$  in. ( $19/32$  in. approx.) Distance throat to orifice =  $0.595 \times 2 = 1.19$  in. ( $1-3/16$  in. approx.)

Distance throat to burner head = not less than  $6 \times 0.595 = 3.57$  in. Area of primary air opening =  $19,500 \div 12,500 = 1.56$  sq.in.

Cross-sectional area of burner head—section x-x =  $2 \times 0.647 = 1.294$  sq.in.—section y-y =  $2 \times \frac{0.647}{2} = 0.647$  sq.in. taper cross-sectional area from section y-y to section z-z, area at section z-z to be as small as practicable.

#### Examples of relationships between essential burner dimensions

cooking requirements, can now satisfactorily be met. Curiously enough, oven heat distribution also seemed quite as satisfactory with this flexible burner as with conventional designs.

A rather extensive basic study of oven insulating material demonstrated that optimum results are not necessarily obtained from great thicknesses of such materials. The elimination of oven metal to metal contacts and the proper density of the material applied appear to be the governing considerations. In fact, it seems that about an average of the densities now being employed on contemporary models will give the best results when all factors are taken into consideration. An important point brought out during this phase of the research was that thermostatically controlled gas ranges are far superior to electric ranges from the

standpoint of their ability to maintain uniform oven cooking temperatures.

One very interesting phase of the work on oven sections was that reported on luminous flame burners. Whether such types will be found practical on a large scale is a question that only field experience will determine, although there is no doubt concerning many of their inherent advantages. Such types of burners were found to provide extremely high broiling temperatures and the heat from them, as would probably be inferred, was found to be extremely penetrating. For certain classes of work the latter characteristic should prove highly desirable while in others probably it would not. Another advantage shown for yellow flame burners is that flashback propensities would be entirely eliminated, although it is likely that

difficulty from carbon deposits under certain conditions of usage might prove somewhat objectionable. Under most conditions, however, combustion should, practically speaking, be complete.

Contrary to original expectations, it was found that the type of Bunsen burner which would provide low temperature oven cooking service also seemed to be most satisfactory from a broiling standpoint. Actually, it provided greater broiler area coverage, averaging around 30 per cent more than some conventional designs and on account of its ability to accommodate greater input ratings would reach higher broiling temperatures within a shorter time.

The range research is being continued and the second project in

(Continued on page 78)

## Personal and Otherwise

### L. B. Denning Heads Dallas Chamber



L. B. Denning

**L.** B. DENNING, president of the Lone Star Gas Company, Dallas, Texas, and last year president of the American Gas Association was elected president of the Dallas Chamber of Commerce January 8.

After his election the following personal tribute appeared in a prominent Dallas newspaper under "Monday Musings" column by Tom C. Gooch:

"Speaking of the utilities reminds us that a very able gas man has been made president of the Dallas Chamber of Commerce. But he has been efficient in other things too. At the height of the depression, when there were hundreds of cases of desperate poverty in our community, L. B. Denning took off his coat and went to work. He could have easily signed the subscription list and gone his way. But he faced a civic duty bravely and carried through with high courage in spite of abuse and criticism. All of which leads us to the conclusion that even utility magnates do have souls that average up pretty well with those in other walks of life."

### Washington Award Made to Dr. Cottrell

**D**R. FREDERICK GARDENER COTTRELL, Washington, D. C., who perfected the process by which the cost of helium gas was reduced from \$1,700 to 10 cents a cubic foot, has been chosen to receive the Washington Award for 1937. This has just been announced in Chicago by Edward J. Mehren, chairman of the Washington Award Commission.

Dr. Cottrell is president of Research Associates, Inc. He is widely known as a chemist and metallurgist, a former director of the U. S. Bureau of Mines and director of the Fixed Nitrogen Laboratory, U. S. Department of Agriculture. Besides his achievements in the cheap production of helium, Dr. Cottrell is well known for his work in nitrogen fixation, for his processes of cleansing gases of dust and dirt by electrical precipitation and for research in petroleum technology. The award has been made for his "social vision in dedicating to the perpetuation of research the rewards of his achievements in science and engineering."

The Washington Award is administered by the Western Society of Engineers in co-

operation with four other engineering societies, which are: American Society of Civil Engineers, American Institute of Mining and Metallurgical Engineers, American Society of Mechanical Engineers and the American Institute of Electrical Engineers. Seventeen men, elected for the purpose, compose the Award Commission.

The tangible symbol of the Award is a bronze plaque mounted in marble. This will be formally presented to Dr. Cottrell at a dinner on February 23. The place of presentation will be announced shortly.

### Miller New Chairman Interstate Commerce

**C**ARROLL MILLER, member of the Interstate Commerce Commission, has been elected chairman of the Commission for the ensuing year, effective January 1, 1937, according to announcement by George B. McGinty, secretary. He succeeds Commissioner Charles D. Mahaffie as chairman.

The new chairman, who is a member of the American Gas Association, comes from Pennsylvania. He was born in Richmond, Virginia, where he received his primary education in private schools. He attended Richmond College preparatory to entering Stevens Institute of Technology, where he graduated with the degree of Mechanical Engineer.

Mr. Miller was appointed a member of the Commission by President Roosevelt in 1933. Prior to his appointment, the largest portion of Mr. Miller's professional life had been devoted to the natural and manufactured gas business and related industries, having served in various positions from foreman to president, and also, for several years, as consulting engineer.

### Public Utility Changes

**H**ENRY C. CUMMINS, vice-president in charge of operation and engineering of Public Utility Engineering and Service Corporation, announces the following appointments and changes in title among executives in the operating and engineering department of the organization:

E. D. Uhlendorf, executive engineer; F. H. Lane, manager, engineering division; A. H. Kuhn, manager, valuation division; G. E. Potter, assistant to executive engineer; W. B. Rittenhouse, assistant manager, engineering division; W. C. Drummond, power production engineer; H. W. Eales, chief electrical engineer; H. S. Whiton, chief mechanical engineer; H. G. Robey, chief hydraulic engineer; L. J. Willien, chief gas engineer; W. J. Welch, chief design engineer; Stephen Wehner, hydraulic engineer; D. C. Hormell, mechanical engineer; H. O. Mathews, automotive engineer; J. A. Agee, budget control engineer.

### Boston Company Makes Executive Changes



F. D. Cadwallader

**F**OUR major changes in executive personnel have been announced by E. M. Farnsworth, vice-president and general manager of the Boston Consolidated Gas Company.

Frank D. Cadwallader, for ten years vice-president in charge of sales, has been advanced to

a newly created vice-presidency in which he will have charge of public relations. Mr. Cadwallader is widely known in merchandising and advertising circles and is at present chairman of the copy approval committee of the national advertising campaign being sponsored by the American Gas Association.

J. J. Quinn, who has been assistant to Mr. Cadwallader, becomes the company's sales manager in direct charge of all sales operations. He came to the Boston company in 1928 from the presidency of the Citizens Gas Light Company of Quincy. He is a past president of the New England Gas Association.

E. H. Eacker has been named assistant to Mr. Farnsworth. He came to the Boston company in 1931 after eight years with the former Charlestown Gas & Electric Company and has since been in charge of the Charlestown electric division of the Boston company and assistant to the vice-president in charge of distribution.

R. W. Menard becomes superintendent of the Investigation Department in addition to his present duties as head of the Application Department. These two departments have been joined into one division with the recently announced retirement of H. A. McCurdy, former head of the Investigation Department.

### South American Visitor

**A**MONG recent visitors to Association headquarters in New York was T. Bernard Glover, engineer for the Primitiva Gas Company of Buenos Aires, Argentina. Mr. Glover, who is a member of the American Gas Association and has visited headquarters on a number of previous occasions, was on a hurried trip for an engineering study. Traveling mostly by airplane, he visited in the south, middle west and west as well as the eastern part of the United States.



## Named Vice-President in Charge of Sales



B. A. Seiple

**B.** A. SEIPLE, general sales manager of the Jersey Central Power and Light Company, has been named vice-president in charge of sales, according to an announcement by Thomas R. Crumley, president.

The position is a newly created one and the appointment was made "in recognition of the excellent work which Mr. Seiple has accomplished during the past few years." He joined Jersey Central in 1928 coming from Charlottesville, Va., where he was commercial manager for the Virginia Public Service Corp.

Under Mr. Seiple's direction merchandise sales have not been restricted to any particular appliance or field but have been spread over the whole utility field, including gas and electric appliances, as well as gas house heating and lighting.

Mr. Seiple has had extensive experience in the utility field, having served in all departments of the business. In addition to his merchandise sales activities Mr. Seiple's work also includes power sales and street lighting.

## Texas Executive Changes

**L.** B. DENNING, president of Lone Star Gas Company, recently announced the following:

Elmer F. Schmidt was elected director and vice-president of Lone Star Gasoline Company. He will have charge of operations, reporting to the president.

Chester L. May was elected executive vice-president and general manager of the Community Natural and Texas Cities gas companies, with duties as heretofore, reporting to the president.

L. B. Denning, Jr., was elected director, vice-president and operating manager of Community Natural and Texas Cities in charge of all operations under Mr. May.

## Action Commended

**A** LETTER of commendation for their courageous action in saving three young people from drowning has been sent to four company workers by E. M. Farnsworth, vice-president and general manager of the Boston Consolidated Gas Company.

The men—Dennis O'Neil, James Leonard, Michael McCauley and E. W. Kinchla—were laying mains near a Wellesley pond when two girls and a youth fell through the ice. With rope and a long plank the company's men pulled the trio out of dan-

ger and hustled them to their homes in nearby automobiles.

In his letter to the men Mr. Farnsworth wrote, in part: "I wish to congratulate you on your quick thinking and speedy action . . . such action as this not only reflects great credit on you but on the Boston Consolidated Gas Company."

## R. H. Gray Advances

**L.** B. DENNING, Jr., vice-president and operating manager of the Community Natural and Texas Cities gas companies, has announced the following changes in personnel:

R. H. Gray, manager for Community Natural at Sweetwater, Tex., since 1935, and prior to that manager at Hamilton for a number of years, is transferred to Abilene as district manager. He succeeds C. C. Redding who resigned from the gas company, Jan. 15, to enter the gas appliance business for himself at San Antonio.

George P. Williams, who was entering his twelfth year as manager at Electra, Tex., has been transferred to Sweetwater as district manager, succeeding Mr. Gray.

## Honor C. R. Phenicie on 25th Anniversary



Carol R. Phenicie

**C.** ARROL R. PHENICIE, vice-president, Wisconsin Public Service Corporation, Green Bay, Wisconsin was honored at a testimonial dinner tendered him by officials and executives of the corporation at Green Bay on December 15.

The dinner, planned as a surprise on the twenty-fifth anniversary of Mr. Phenicie's association with the company, was attended by fifty executives from the corporation's territory.

Utility leaders in the middle west, associates, friends and employee groups paid tribute to Mr. Phenicie by telegram and letter. These greetings were bound in a silver book, which also included a signed testimonial from his associates attending the dinner, and was presented to Mr. Phenicie at the dinner.

Later in the evening the men attended an employee meeting at which 475 men and women from the Green Bay division were present. At this meeting twenty-seven veteran employees with service records varying from twenty-five to forty-one years were honored. Highlight of the employee meeting was a dramatization of Mr. Phenicie's life.

Mr. Phenicie's utility record dates back to 1901 when, following his graduation

from the University of Kansas, he became employed by the Dearborn Power and Light Company in Chicago. In 1904 he received his master's degree from the Armour Institute and went to work for a corn products company as electrical engineer. The call of the utility industry brought him to the old Chicago and Milwaukee Electric Railroad in 1908 where he became employed as superintendent of motive power. He remained with this company until December, 1911 when he was sent by Clement C. Smith to study the operation of the Wisconsin Public Service Company at Green Bay.

During the twenty-five years he has been at Green Bay he has successfully filled the position of superintendent, general manager and vice-president. He is a past president of the Wisconsin Utilities Association and has been a member of several national committees. His work in public relations has marked him as a leader in the utility industry.

## Magers Heads Better Copy Committee

**D.** ONALD D. PARRY, president of the Public Utilities Advertising Association, has announced the reappointment of Kenneth Magers, publicity manager of the Cincinnati Gas and Electric Company, as chairman of the Better Copy Contest Committee for 1937.

Mr. Magers was prevailed upon by Mr. Parry and other officers of the Association to serve a second term as chairman of the Better Copy Contest Committee because of the excellent job he did in 1936.

Not only was he instrumental in the selection of a diversified group of nationally known judges for the 1936 contest, but his efforts, and those of his committee, in the production of an outstanding Better Copy Contest annual were highly successful.

## Maurer to Wilcolator

**A** NNOUNCEMENT has been made by The Wilcolator Company, Newark, N. J., of the appointment of Rufus H. Maurer as a vice-president of the company. He will make his headquarters in Chicago.

Mr. Maurer is well known in the temperature control industry, being formerly associated with the Spencer Thermostat Company. He was one of the original members of the utilization department of the Consolidated Gas Company of New York, and, as illuminating engineer, was special representative to the Illuminating Engineering Society, as well as a member of the Society of Gas Engineers of New York City and the American Gas Association. As president of the Automatic Safety Pilot Corporation of New York, he is believed to have been the builder of the first safety pilot for gas appliances in this country.

# Affiliated Association Activities

## New England Gas Association



Herman Russell

**H**ERMAN RUSSELL, president of the American Gas Association, will be one of the principal speakers at the annual meeting of the New England Gas Association which will take place Thursday and Friday, February 11 and 12, at the Hotel Statler, Boston. Mr. Russell's topic will be "It's Our Business—Let's Mind It." The first session will also be addressed by Alexander Forward, managing director of the American Gas Association.

In addition to the President's Address by F. L. Ball, the morning session will include the presentation of sales contest and best paper awards and a review of the Association's year by Clark Belden, executive secretary. A feature of this session will be a personal appearance of the Mystery Chef who will address the delegates on "Gas Still Stands Unchallenged."

Walter D. McCrea, Cambridge, will open the Thursday afternoon session with a discussion of summer and winter air conditioning. Production and distribution developments will be handled by Richard E. Kruger, chairman, A. G. A. Production Committee and D. P. Hartson, chairman, A. G. A. Distribution Committee, respectively. Other papers to be presented at this session are: "Serving the Commercial Market" by Harry O. King; "Industrial Gas Application Developments" by Henry Heyn, Toledo, Ohio, and "This Question of Service" by Harry D. Lehman, Philadelphia.

Elizabeth Sweeney, chairman of the A. G. A. Home Service Committee, will present the latest home service developments at the Friday morning session. H. T. East, Chicago, will discuss "Satisfactory Gas Service." A highlight of this session will be an address by D. D. Parry, president of the Public Utilities Advertising Association. Mr. Parry's subject will be "Promotional Advertising—A New Weapon." D. H. Linton will tell "How We Made a Market Survey." Papers on "Appliance Financing Plans" and "Modernization" by Harris E. Dexter, Poughkeepsie, and Hugh H. Cuthrell, Brooklyn, will round out the session.

The closing session, Friday afternoon, will be devoted to four addresses on vital topics. Robert F. Elder, associate professor of marketing, Massachusetts Institute of

Technology, will talk on "Market Research Possibilities." The manufacturers' viewpoint will be represented by William T. Rasch, president of the Association of Gas Appliance and Equipment Manufacturers, whose address is entitled "Of Interest to All of Us." R. S. Agee, Washington, who delivered an outstanding paper at the A. G. A. convention last October, will again discuss the new home market. The meeting will conclude with an important address by Robert E. Ginna, Rochester, on "Appraising Domestic Competition."

There will be a home service luncheon Thursday for the purpose of discussing practical phases of home service work. Kathleen Atkinson, chairman of the N. E. G. A. home service group, is in charge of the luncheon program.

The annual dinner and dance will be held Thursday evening.

Program arrangements have been in charge of a committee headed by R. J. Rutherford, chairman of the sales division.

## Wisconsin Utilities Association



T. J. Danehy

**N**ATIONAL and state authorities on selling, engineering and operating will be featured at the Wisconsin Utilities Association's first exclusive Gas Section convention, which will take place March 15 and 16 at the Schroeder Hotel, Milwaukee.

In addition to a well-rounded convention program, there will be an appliance and equipment exhibi-

## Convention Calendar

### FEBRUARY

- 4-5 A. G. A. Eastern Natural Gas Regional Sales Conference  
William Penn Hotel, Pittsburgh, Pa.
- 10-12 Southern Gas Association—Southwest Regional Gas Sales Conference  
Peabody Hotel, Memphis, Tenn.
- 10-12 New England Gas Association  
Hotel Statler, Boston, Mass.
- 18-20 A. G. A. Mid-West Regional Gas Sales Conference  
Palmer House, Chicago, Ill.
- 23-25 Joint Gas Conference—British Gas Federation  
Birmingham, England

### MARCH

- 2-3 A. G. A. National Commercial and Hotel and Restaurant Sales Conference  
Benjamin Franklin Hotel, Philadelphia, Pa.
- 15-16 Wisconsin Utilities Association—Gas Section, Commercial and Technical Divisions  
Schroeder Hotel, Milwaukee, Wisc.
- 23 New Jersey Gas Association  
Berkley Carteret Hotel, Asbury Park, N. J.

### APRIL

- 12-14 A. G. A. Distribution Conference  
Wardman-Park Hotel, Washington, D. C.
- 21-23 Missouri Association of Public Utilities  
Elms Hotel, Excelsior Springs, Mo.
- 27-29 U. S. Chamber of Commerce  
Washington, D. C.

### MAY

- 4-5-6 Pennsylvania Gas Association  
Lodge of the Sky Top Club, Sky Top, Pa.
- Wk. 10 Natural Gas Department, A. G. A.  
Kansas City, Mo.
- 24-26 A. G. A. Production and Chemical Conference  
Hotel New Yorker, New York, N. Y.

### JUNE

- 2-4 Edison Electric Institute  
Chicago, Ill.
- 8-9 A. G. A. National Conference on Industrial Gas Sales  
Palmer House, Chicago, Ill.
- 10-11 Canadian Gas Association  
Chateau Laurier Hotel, Ottawa, Canada
- 11-16 International Gas Union  
Paris, France
- 14-20 Second World Petroleum Congress  
Paris, France
- 24-26 American Society of Heating and Ventilating Engineers  
New Ocean House, Swampscott, Mass.

### OCTOBER

- Wk. 11 American Gas Association
- 18-21 American Society for Metals  
Atlantic City, N. J.

bition. The time of the convention has been set to coincide with the production of new lines by manufacturers and also to coincide with the Home Show at the auditorium. Exhibit attendance prizes for utility men will be offered as an added inducement to inspect displays.

T. J. Danehy, chairman of the Section, will preside at the meetings. J. H. Fagan is chairman of the Program and Exhibit Committees.

Acceptances to address the convention from authorities outside the state follow: A. H. Abbott, Northern States Power Co., Minneapolis; R. J. Canniff, Ruud Manufacturing Co.; R. M. Connor, A. G. A. Testing Laboratories; Paul J. Dorsey, Cribben & Sexton Co.; W. E. Leverette, Nashville Gas & Heating Co.; Edna Van Horn, Better Homes & Gardens.

Wisconsin program speakers include: R. B. Brown, president, Milwaukee Gas Light Co.; O. W. Barenscher, Sheboygan; Martin T. Bennett, Public Service Commission; T. J. Danehy, Manitowoc; John Dopp, Fond du Lac; George Dormer, Beloit; J. E. Garaghan, Wisconsin Retail Hardware Ass'n.; E. C. Hemes, Milwaukee; Peter J. King, Milwaukee Master Plumbers Ass'n.; Professor Otto Kowalke, Madison; A. Knutson, A. A. Schuetz, Milwaukee.

Round table engineering discussion leaders will be: Frank Wilkinson, La Crosse; G. A. Anderson, Sheboygan; E. C. Hemes and N. P. Mueller, Milwaukee; Commercial—C. A. Debell, A. G. Blitz, Sheboygan;

H. Turkelson, Racine; K. Browne, Milwaukee.

Engineering discussions will include production, distribution, meters, servicing appliances; commercial—cookery, refrigeration, kitchen planning, water heating, house heating, air-conditioning, small appliances.

Among the subjects that should be especially profitable are: "Meeting T.V.A. Competition," "How Best To Tie-in with the A. G. A.'s Sales and Advertising Program," "Reducing Maintenance and Improving Service," "Aims of A. G. A. Laboratory Pertaining to Sales, Maintenance and Customer Relations," "Lure of Modern Cookery," "Looking at the New Classification of Accounts Through the Operator's Eyes," "Winter Gas Troubles," "Recent Developments in Water Gas Manufacturing Process," "High Emulsion Treatment," "Manner of Flow of a Liquid Through a Thin Plate Orifice in a Pipe Line," "Pilot Outages—with and without Oil Fogging," "Dealer Cooperation," "Kitchen Planning."

### Missouri Association of Public Utilities

**T**HE 1937 convention of the Missouri Association of Public Utilities will be held April 21, 22 and 23 at the Elms Hotel, Excelsior Springs, Mo., according to an announcement by Jesse Blythe, assistant secretary. The program is now being prepared and will be given at a later date.

## McCarter Medal Awarded



H. C. Blackwell, left, president of The Cincinnati Gas and Electric Company, is shown presenting a McCarter Medal to R. O. Crossland, district superintendent of the company

**F**OR having performed a most meritorious act in the saving of human life by the Schafer prone pressure method of resuscitation, Reynold O. Crossland, employee of The Cincinnati Gas and Electric Company, Cincinnati, Ohio, was recently awarded a McCarter Medal and Certificate.

The act for which Crossland was honored occurred during the repair of a high pressure gas leak in Cincinnati. A hole had been dug exposing the drip stem in which the leak had developed. John E. Gilbert, one of the employees doing the work, was overcome when he attempted to wrap the drip stem. Prompt application of the prone pressure method of artificial respiration by Crossland was successful in reviving Gilbert.

Presentation of the medal was made by H. C. Blackwell, president, at a meeting of executives and department heads.

## Natural Gas Wrinkle Contest Winners

**F**IFTEEN winners of cash prizes in the 1936 Wrinkles Contest have been announced by the committee in charge of this activity of the Natural Gas Department. In all, 120 entries were submitted and published during the year, the largest number in history. Three prizes—\$25, \$10 and \$5—are given in each of five classifications. The 1936 winners are:

**Production**—First, Wrinkle No. 105, Gas Well Surface Choke, by J. L. Hamilton and J. W. Burrage, Lone Star Gas Co., Ranger, Tex.; second, Wrinkle No. 33, Design for Welded Casing Head, by Harry V. McKinney, East Ohio Gas Co., Massillon, Ohio; third, Wrinkle No. 46, Device To Close Boiler Furnaces During Emergency, by F. H. Townsend, Lone Star Gas Co., Gordon, Tex.

**Transmission**—First, Wrinkle No. 9, Limiting Device for Sleeves, by W. J. Gray, Canadian Western Natural Gas, Light, Heat and Power Co., Ltd., Calgary, Alberta; second, Wrinkle No. 74, Portable Pipe Unloading Rig, by R. L. Mentzer, Knoxdale Field, United Natural Gas Co., Oil City, Pa.; third, Wrinkle No. 87, Pipe Stop, by J. M. Caley, Ohio Fuel Gas Co., Mount Vernon, Ohio.

**Distribution**—First, Wrinkle No. 18, Remote Control of Station Governors, by Oscar A. Rohr, Western United Gas and Electric Co., Aurora, Ill.; second, Wrinkle No. 101, Brass Discs Mark House Lines, by J. A. Bradley, Equitable Gas Co., Pittsburgh, Pa.; third, Wrinkle No. 22, Welder's Handy Circle Cutting Tool, by Joe Fiori, Peoples Natural Gas Co., Apollo, Pa.

**Office**—First, Wrinkle No. 27, New and Accurate Method of Taking Inventory by Hilda B. Hubley, East Ohio Gas Co., Canton, Ohio; second, Wrinkle No. 10, Chart Rack and Schedule File for Billing, by J. S. Turner, Manufacturers Light and Heat Co., Pittsburgh, Pa.; third, Wrinkle No. 30, Keeping the Family "Gas-Minded," by M. C. Llewellyn, East Ohio Gas Co., Akron, Ohio.

**Safety**—First, Wrinkle No. 111, Vent Pipe, by Frank J. McKenna, Equitable Gas Co., Pittsburgh, Pa.; second, Wrinkle No. 16, Gas Engine Safety Switch, by R. M. Sinnamond, Peoples Natural Gas Co., Wilkinsburg, Pa.; third, Wrinkle No. 64, Truck and Automobile Support, by John Elwood, Lone Star Gasoline Co., Ranger, Tex.

E. A. Clark, Manufacturers Light and Heat Co., Pittsburgh, Pa., was chairman of the Awards Committee, which also included J. L. Foster, Lone Star Gas Co., Dallas, Tex., and D. P. Hartson, Equitable Gas Co., Pittsburgh. John H. Schalek is chairman of the Wrinkles Committee and all entries for the 1937 contest should be sent to him at the Peoples Natural Gas Co., 545 William Penn Way, Pittsburgh, Pa.



## Accounting Section

Herbert E. Cliff, Chairman

H. W. Hartman, Secretary

E. J. Tucker, Vice-Chairman

# Summary of Use of Sales Statistics

By H. L. DALBECK

New England Gas & Electric Association  
Cambridge, Mass.

IT has been a matter of controversy between utility accountants for some time as to the value and the use of statistics relating to sales, whether for use in rate making or load building. Accordingly the General Accounting Committee attempted to solicit inquiries from participating companies as to the types of billing equipment in use, the kind of analysis regularly maintained or available, of what the analysis consisted and when prepared, for what purposes the analysis was used, whether or not statistics were available, and when and for what purposes any special analysis had been made.

It was not expected that the information derived from this inquiry would result in an all inclusive summary of activities but would rather offer to utility executives a general picture of the practices of the industry and possibly to determine the advisability of continuing such a study on a more intensive scale.

### Summarization

Replies from 69 companies outlining their practices relative to the determination and accumulation of sales statistics indicated a wide divergence in practice and in opinion as to the advisability of preparing statistics currently. Of the companies replying, it was considered that the group was representative of the industry and presented a typical cross section of practices followed. This can be exemplified by summarizing the types of billing equipment used by the reporting companies as follows:

Billing Machines	41
Tabulating Machines	12
Billing Machine and Hook-up	6
Manual Billing	9
Billing Machine and Manual	1
	69

Of these 69 companies, 29 report some form of analysis is regularly made, 10 companies making an analysis at each consumption step (i.e., total gas used at 1CCF, 2CCF, 3CCF, etc.) as well as at each rate step (i.e., gas used within each block of a rate) 8 companies maintaining analysis at each consumption step only and 8 at each rate step only. Three companies report that analysis is maintained on other bases such as designated consumption steps and by blocks of revenue (i.e., accounts billed within certain specified amounts). With

Contribution of General Accounting Committee, H. L. Gruehn, chairman, Consolidated Gas Electric Light & Power Company, Baltimore, Md.

one exception the above companies make this analysis monthly, one company reporting the analysis being made quarterly and one company reporting that analysis is made quarterly, semi-annually, and annually in addition to the monthly statistics determined. This latter company is employing the use of tabulating equipment.

In addition to the 29 companies commented on, there are 21 companies who maintain this information (although monthly tabulations are not currently summarized) which is available for analysis purposes, making a total of 50 companies of the reporting 69 who either make or have available in some form statistical data pertaining to their sales.

The sales statistics that are maintained and either tabulated or are available by these 50 companies are summarized below:

Monthly consumption at each consumption step by rates	49
Rate classification by blocks of consumption	42
Class of service (Residential, Commercial, etc.)	47
Kind of business (Drug Store, Grocery, etc.)	6
Town or tax district	21
Company division	30
Type of appliance (partial)	1
Number of customers	44

It will be seen from the above that all but one of the 50 companies maintaining sales statistics have available information by monthly consumption, all but 3 by class of service and all but 8 by rates. The remaining companies who report that no analysis is made or available are not confined to the smaller utilities, several of the larger utilities reporting that (1) statistics formerly made have been discontinued (2) that over a period of years it is more economical to have analysis made as required and (3) that there has been no demand by the management for such statistics.

Of the 50 companies having information available 42 report the use of statistics as follows: 8 companies not reporting:

For proving the billing operation and analysis for determining rate statistics	14
For proving the billing operation, analysis for determining rate statistics and providing management with sales statistics	11

For proving the billing operation only	4
Analysis for determining rate statistics and providing management with sales statistics	3
For proving the billing operation, analysis for determining rate statistics, market analysis and providing management with sales statistics	3
Analysis for determining rate statistics and market analysis	2
For proving the billing operation and providing management with sales statistics	2
Analysis for determining rate statistics only	2
Market analysis only	1
	42

From the above it is apparent that sales statistics when available are not subject to a general use, but because of a variety of reasons vary, probably dependent upon management requirements, conditions affecting the companies, and the type of equipment used. The profitable use of statistics is apparently dependent to some degree by the demand for information and this demand is controlled by management policy, regulatory commissions, requirements and frequency of rate charges. It was the consensus of those commenting that where sales statistics had been available they had been used to good advantage, although whether this use was profitable is probably a matter of opinion or determination.

It is to be expected that the sources of sales statistics will vary dependent upon the type of equipment used, but for the purpose of outlining the generally accepted methods, the following tabulation indicates the various methods followed:

Billing media	19
Tabulating cards	13
Pegboard	2
Tabulation cards from hook-up	6
Tally sheet by tick method	2
Combination pegboard and tally sheet	1
Other methods	7
	50

Other methods include comptometer calculations from revenue tapes, sales journal prepared as a copy of bill and by-product of bill proof and sales classification media.

Twenty-six companies reported some form of special analysis had been made for the purpose of obtaining sales statistics, but 5 reported that assuming basic information as to consumption, class of service, kind of business and number of customers had been available, that the information

(Continued on page 78)

## Commercial Section

F. M. Banks, Chairman

J. W. West, Jr., Secretary

Hugh Cuthrell, Vice-Chairman

# Modern Merchandising Theme of Mid-West Regional Gas Sales Conference Program

**T**HE program of the eleventh Mid-West Regional Gas Sales Conference, which takes place February 18-20 at the Palmer House, Chicago, Ill., should contain something of value to everyone interested in the sale of gas. At the recent meeting of the Council in Chicago, it was the unanimous opinion of those present that our program this year should attempt to point out to all members in the industry that sensational and drastic changes are taking place in the industry, particularly from the standpoint of merchandise sales. If we as an industry wish to uphold our splendid record of service to home owners, we must make up our minds that it is necessary to institute new methods and new ideas in our activities to promote the sale of gas burning appliances.

With this thought in mind, we have secured a keynote speaker, progressive in thought and action, and have assigned to him the subject of "Changes in Today's Business Trends." Following this keynote address, B. J. Mullaney, of The Peoples Gas Light and Coke Company, Chicago, a past president of the Association, will address the conference on "National Advertising—Today and Tomorrow."

### Banks To Speak

F. M. Banks, of the Southern California Gas Company, Los Angeles, Calif., chairman of the Commercial Section, will speak on the subject of "The Gas Industry as a Pacemaker." In his talk, Mr. Banks will develop the thought that the gas industry is leading and will continue to lead in modern methods of merchandising.

Hall M. Henry, Utilities Management Corporation, New York, will present a paper on "Prospects in Gas Refrigeration Sales." Mr. Henry will point out the newer and better methods of refrigeration merchandising and outline the coming national contest. Mr. Hall will be followed by C. E. Bartlett of Philadelphia, who will show a water heating film illustrating modern methods of merchandising water heaters.

The second day's meeting will open with a talk on "Promotional Activities in the Industry." The speaker on this subject will be announced shortly. The next subject to be presented is, in my opinion, one of the most important—namely, "Employee Sales Training." The training of all the employees of our industry in promotional work is coming to the forefront rapidly, and the results obtained by those

By J. FRANK JONES

Chairman, Mid-West Regional Gas Sales Conference

companies who have gone into it indicate that it is well worth any effort put into it. For this subject we have invited George Irving of the General Electric Appliance Company, who has conducted some of the most successful employee training schools in the country.

"Home Service and Kitchen Modernization Trends" is one of the most timely subjects on the program of this session. It will be discussed by B. T. Franck of the Grand Rapids Gas Light Company.

Highlight of the program is, we believe, a cooking demonstration to be given by Miss Barbara Jenkins of Denver, Colorado. This young lady is just six years of age and what she can do with a modern gas range will surprise and delight everyone present. She has been a sensation wherever she has appeared.

An address and demonstration by E. C. Sorby of George D. Roper Corp., Rockford, Ill., are also features of the meeting. Mr. Sorby has worked up a skit that is pronounced by those who have seen it as one of the most interesting and entertaining that has ever been presented to a group of gas men. It is also hoped to have a skit and demonstration by Paul Dorsey of the Cribben & Sexton Co., Chicago, but this has not been definitely arranged at this time.

On Saturday morning, the last day of the conference, there will be a home service meeting, which will include an attractive program. Karen Fladoes, home service director, The Peoples Gas Light and Coke Co., Chicago, will preside at this meeting.

The opening session, Thursday morning, will begin at 10 o'clock, with J. Frank Jones presiding. B. T. Franck will preside Thursday afternoon, and F. X. Mettenet, Friday morning. The session Friday afternoon will have F. M. Rosenkrans as presiding officer.

Everyone interested in gas sales is invited to the conference.

## Southern-Southwestern Sales Conference, Feb. 10-12

**T**HIS year's Southern-Southwestern Gas Sales Conference will again be held in conjunction with the annual meeting of the Southern Gas Association. The time is February 10-12 and the place is the Peabody Hotel, Memphis, Tenn. A comprehensive and interesting program of sales topics has been arranged for the meeting under the direction of William E. Leverette, chairman of the conference. The meeting of the Southern Gas Association will be conducted by the president, H. E. Meade, New Orleans Public Service Inc., New Orleans.

With increased competition in many quarters and consequent speeding up of gas merchandising activities, the papers and discussions at this conference are expected to bring out many new developments in sales methods. Considerable attention will be devoted to cooperative undertakings in the industry which are doing much to keep gas in the forefront of the public consciousness.

Following is the program for the sales conference:

Wednesday, February 10

2:00 P.M.

Presiding—William E. Leverette, Nashville Gas & Heating Co., Nashville, Tenn.

Tying-in with the National Advertising Program—Willard G. Wiegel, Lone Star Gas System, Dallas, Texas.

What the Gas Industry Can Do for the Architect—Wm. T. Warren, Warren, Knight & Davis, Architects, Birmingham, Ala.

The Eastern Natural Gas Regional Sales Conference is being held at the William Penn Hotel, Pittsburgh, Pa., February 4-6, under the chairmanship of F. T. Rainey, Ohio Fuel Gas Company, Columbus, Ohio. A complete report of the conference will appear in the next issue of the A. G. A. Monthly.

House Heating Sales Demonstration—A Skit—Chester Young, Dallas Gas Co., Dallas, Texas.

J. E. Ketner, Little Rock Gas & Fuel Co., Little Rock, Ark.

Application and Trends in Modern House Heating—W. H. McInnis, Memphis Power & Light Co., Memphis, Tenn.

Thursday, February 11

2:00 P.M.

Presiding—L. L. Baxter, Vice-Chairman, Arkansas Western Gas Company, Fayetteville, Ark.

Promoting Modern Gas Kitchens Cooperatively—William E. Leverette, Nashville Gas & Heating Co., Nashville, Tenn.

Round Table Discussion—Southern-Southwestern Experiences and Trends in Summer Air Conditioning with Gas.

Discussion Leaders—

O. A. Kinzie, Dallas Gas Co., Dallas, Texas.

Carl Dean, Oklahoma Natural Gas Co., Tulsa, Okla.

Friday, February 12

2:00 P.M.

Presiding: Wm. E. Leverette, Chairman—Nashville Gas & Heating Co., Nashville, Tenn.

Dramatizing Modern Gas Cookery—Paul Dorsey, Cribben & Sexton Co., Chicago, Ill.

More Automatic Heating—How to Get It—C. H. Light, The Peoples Gas Light & Coke Co., Chicago, Ill.

Prospects for Gas Refrigeration—Louis Ruthenberg, Servel, Inc., New York, N. Y.

## What Customers Want in Their Future Homes

WHEN 11,207 people put down in great detail exactly what they want in a house, the importance of these facts to planners, builders, and such interested parties as gas companies and others who supply needed services, is obvious. Such a body of facts was collected from customers of the Niagara Hudson System and published in the November issue of *The Architectural Forum*.

Of particular interest to the gas industry are the replies listed under heating, insulating and mechanical conveniences. Besides listing "Can't heat rooms evenly" as third among their "pet peeves," most of those answering the question had a good idea of what sort of heating plant they must have in their next home—one which provides thermostatic control and means for circulating the air. In addition, they would like to have other features of air conditioning. Fifty per cent of the total answered "must have" thermostatically controlled heating in their next home, while 47 per cent "would like" it. As for air conditioning, 65 per cent said they "would like" to have it and 30 per cent put it in the "must" class. Of the various phases of air conditioning, the order of preference was: 48 per cent want circulation, 23 per cent, cooling; 22 per cent, filtering; and the remaining 7 per cent, humidity control.

The decided demand for wall and ceiling insulation is noteworthy. Fifty-one per cent reported they must have it; 46 per cent would like to have it and 3 per cent stated it was not needed.

First in the relative order of importance that the majority assign to various mechanical conveniences, comes the automatic water heater with more than 43 per cent. Next in importance came the mechanical refrigerator with 31 per cent and oven heat controlled stove was third with 27 per cent. Fourth, fifth, sixth and seventh places went to: kitchen ventilating fan, bathroom heater, dishwasher sink, and garbage disposal unit.

As a focal point of its "Five Star" program, Niagara Hudson, in collaboration with *American Home*, *Women's Home Companion* and *Better Homes and Gardens*, and

local architects, will design and build for exhibition three houses, one in Albany, one in Syracuse and one in Buffalo, exhibiting requirements established by the survey.

While some of the data collected undoubtedly reflect purely local preferences,

for the most part the findings are of national significance. Two facts stand out most clearly: first, the woman who has been emancipated from the back-breaking drudgery of housework now serves notice that she will insist on even greater conveniences and comforts than in the past; second, advocates of new ideas in planning still have a long way to go to convince the public of the superiority of basic changes from long-accustomed room arrangements.

## Gas Utilities To Participate in National Home Project

A NATION-WIDE program to demonstrate the feasibility of construction of low priced homes, was launched recently by national organizations identified with the building industry.

The National Lumber Manufacturers Association and the National Retail Lumber Dealers Association are sponsoring the national demonstration home program for the lumber industry.

The long-range objective of the program is to make available to approximately 70 per cent of the nation's families, properly designed and well-constructed homes containing minimum requirements of livability and comfort.

"This program will attempt to prove," it was stated by the Federal Housing Administration, "that properly designed small houses can be built to sell within a price range that will attract the great mass of potential small home owners comprising a large majority of our population."

Coincident with the announcement, the first of a series of dealer meetings, sponsored by the National Retail Lumber Dealers Association, opened at Indianapolis, Ind. At this first meeting, a demonstration home program was launched which has as its objective the construction of one or more low priced homes in approximately 1,000 communities throughout the country. These homes are designed in accordance with principles outlined in the Federal Housing Administration's Technical Bulletin No. 4.

The Federal Housing Administration will

aid in the construction industry in this nation-wide program in every way possible. A series of subdivision conferences will be held during the coming year in large population centers where Housing Administration experts will outline details of land planning to operative builders and others interested in small house construction. Conferences on design and construction will also be held in many cities to give information concerning the principles of planning small houses, while mortgagee conferences will also be held to explain how small homes may be financed by private lending agencies under terms of the Housing Administration's insured mortgage plan.

In coordinating the nation-wide program and in order to make it more comprehensive, plans have been made for participation by gas utilities, newspapers and retail department stores.

Manufacturers and distributors of building equipment, including gas utilities, are being urged to offer "package" heating, cooking, refrigeration and plumbing units for these homes.

The homes will follow the plans of houses E, B and D shown and described in Federal Housing Administration's Technical Bulletin No. 4, available from the Federal Housing Administration at Washington or at any of its regional and state offices.

The gas company members of the Association will be advised of plans for these homes in their communities as rapidly as word is received from the National Retail Lumber Dealers Association.



## Home Service Committee

Elizabeth Sweeney, Chairman

Jessie McQueen, Home Service Counsellor

# Home Service Under Way

### REGIONAL SALES CONFERENCES INCLUDE HOME SERVICE

#### *Eastern Natural Gas Regional Sales Conference*

**ELIZABETH SWEENEY**, chairman of the A. G. A. Home Service Committee, and director of home service in the Empire Gas & Electric Company, Geneva, N. Y., will present the subject "Creative Sales Through Home Service" on the general sessions program, Thursday, February 4. On Friday morning, Flora Dowler of the Binghamton Gas Works, Binghamton, N. Y., and chairman of the home service group of this conference, will preside at a Home Service Breakfast and program preceding the general program. "Equipping Kitchens in Public School Laboratories" will be the subject for discussion led by Dorothy Shank of the American Stove Company at Cleveland. Hulda Ungericht, of The Ohio Fuel Gas Company at Columbus, will describe the travelling cooking schools of that company using the subject "Gasco Food Institute."

#### *Southern-Southwestern Regional Gas Sales Conference*

Mildred Clark of the Oklahoma Natural Gas Company, as chairman of the home service group, will preside at two sessions on Thursday, February 11. This conference has placed a general sessions program at the disposal of Home Service,—an honor and a responsibility greatly appreciated. This program includes a dramatic presentation of modern gas appliances in three acts with the following six characters: Mrs. Eva Pender, United Gas System, Beaumont, Texas; Albertine Berry, Lone Star Gas Co., Dallas, Texas; Grace Larrabee, Louisiana Power & Light Co., Algiers, La.; Nell Read, San Antonio Public Service Co., San Antonio, Texas; Margaret Crosson, Memphis Power & Light Co., Memphis, Tenn.

Eye-catching subjects for other discussions are as follows:

"The Knock That Serves and Sells," Lucie Lee Corley, Lone Star Gas Company, Fort Worth, Texas.

"Building Up to a Down Payment," Doris McKnight, Oklahoma Natural Gas Co., Enid, Okla.

"Twenty Million People Can't Be Wrong," Margaret Marable, Albertine Berry, Lone Star Gas Co., Dallas, Texas.

"Rolling Wheels Gather Sales" Dorothy Correll, Memphis Power & Light Co., Memphis, Tenn.

A luncheon meeting program will present six 2-minute talks on current home service activities as follows:

### By JESSIE MCQUEEN

#### Home Service Counsellor

"Healthful Cookery Demonstrations," Mrs. Robert Bond, Nashville Gas & Heating Co., Nashville, Tenn.

"Employee Schooling on Proper Use of Gas Appliances," Mrs. Carroll Miller, United Gas System, New Iberia, La.

"Using Local Radio Programs to Sell," Julia Myers Melton, Birmingham Gas Company, Birmingham, Ala.

"Aiding Dealers' Service Problems," Hazel Delaney, United Gas Company, Houston, Texas.

"Cooking Schools Go Modern," Mary Alice Willis, Mississippi Power & Light Co., Jackson, Miss.

#### *New England Gas Association*

"Home Service Developments" is the subject on the general sessions program to be presented by Elizabeth Sweeney, chairman of the A. G. A. Home Service Committee. At a luncheon meeting on Friday, February 12, Kathleen Atkinson of the Providence Gas Company and chairman of the New England group of Home Service Directors, will present the following program: "The Gas Industry Joins Hands" by R. L. Fletcher of the Providence Gas Company, and discussed by Elizabeth Sweeney; Marjorie Mills, home economics editor of the Boston Herald-Traveler, on the subject "Preparation of Newspaper Food Copy"; and Margaret Fossett of the Boston Consolidated Gas Company will describe a display of new literature and cook books of value to home service.

#### *Mid-West Regional Gas Sales Conference*

Home service again appears on the general sessions programs with the subject "Home Service and the Sales Manager" to be presented by B. T. Franck of the Grand Rapids Gas Light Company, Grand Rapids, Mich. An entire Home Service Session will follow the regular conference on Saturday morning, February 20, at which time Karen Fladoes of The Peoples Gas Light & Coke Company will preside as chairman: "A Sample Kitchen Planning Demonstration for Home Service" by Harry Swenson, kitchen planning consultant of The Peoples Gas Light & Coke Company; "Consumers Education from Questionnaires," Esther Kimmel, *Pictorial Review Magazine*, New York; "Gas Equipment in Public School Laboratories," Dorothy Shank, American Stove Company, Cleveland, Ohio; and "Home Service Under Way" Helen Diamond, Minneapolis Gas Light Co.

With this bombardment of home service through the month of February we don't think there should be anyone left in the gas industry who will not appreciate that home service constitutes a real contribution to the sales activities of our business.

### HOME SERVICE NEWS NOTES

#### *Sales Floor Demonstrations*

On a December visit to the Minneapolis Gas Light Company we walked in on one of the most active sales floors we have seen in many a day. Corn was popping in one section and we found it to be a demonstration of the "See 'Em Pop" corn poppers, a popper which functions particularly efficiently on the speedy modern gas range burner. Helen Diamond, home service director, reported that in the month of December over 17 gross of poppers were sold (for 49 cents each), and over 8,000 pop corn recipe sheets delivered. The display included a small barrel of pop corn and visitors were shown how to make various pop corn confections, and samples of corn were distributed to visitors. This popper is the one which was exhibited at the recent A. G. A. Convention in Atlantic City and attracted much interest.

We were interested in the recipe sheets given out by this organization, which included sales and household information printed on the back of the recipe sheets. This surely is making use of "both sides of the question."

#### *Book Reviews*

In Kansas City we were impressed with the up-to-the-minute activity of book reviews in the Home Service Auditorium, tying along with their particular popularity in the women's study groups through Kansas City. Mrs. Dorothy Diggle, home service director, of the Kansas City Gas Company, has announced a series of book reviews and the current one at the time of our visit was that on China. The book "My Country and My People" was reviewed by Mrs. Diggle. This was followed by a demonstration of Chinese foods, showing the advantages of the modern gas range in their preparation. In this she was given the assistance of a local distributor of La Choy Food Products. An illustrative display of Chinese costumes, chop sticks and other Chinese articles afforded an effective background.

#### *Gas Equipment in Public School Food Laboratories*

Five hundred clock-controlled gas ranges were sold to the Los Angeles public schools this last year. To acquaint the Home Economics teachers with the use of the ranges



a meeting was held last Spring in the auditorium of the Los Angeles Gas and Electric Corporation with approximately 150 teachers present.

At the Teachers' Institute program on December 15, attended by Home Economics teachers of the Los Angeles City schools, a demonstration was given on the subject "Foods of 1937." The demonstration was conducted by Gladys Price of the Southern California Gas Company and the cooperating directors were Katherine Rathbone of the Southern Counties Gas Company and Victoria Warner of the Los Angeles Gas & Electric Corp.

#### *A Good School Bulletin!*

With the interest today in new equipment in many school laboratories we recommend a Government bulletin entitled "Space and Equipment for Homemaking Instruction." It is published by the Office of Education, U. S. Department of the Interior, and is a guide to location and arrangement of homemaking departments in the public schools. It is for sale by the Superintendent of Documents, Washington, D. C., for 40 cents.

#### *"Phantom Servant"*

A particular feature of the home service activities of the Wisconsin Public Service Corp. is the cooperation over a period of years with the theatres throughout the territory. Food demonstrations with modern equipment on the platform intersperse regular movie matinees, and during November of this year automatic features of gas ranges were shown at the Orpheum Theatre in Green Bay at six consecutive matinees. A complete oven meal was put in the oven at 1:10 P.M.; then at 4:10 P.M., after the matinee, the meal was removed and given to the person holding the lucky number. Zella Patterson, home service director, writes us that there was no talking whatever, but many "ahs" and "ohs" from the audience when the meal was removed from the oven.

### **GASCO INSTITUTE**

(Continued from page 49)

number of tickets are drawn from the wheel, but the names are not announced. These ticket numbers are posted in the grocery stores, and women visiting the stores are entitled a free basket of groceries if their ticket stub corresponds with the numbers posted in the store.

The Institute, itself, offers a fine list of prizes. Each food account cooperating in the Institute is required to furnish one or more items in its line, in quantities of 24. Large shopping bags bearing the seal of the Institute are filled with these groceries. This makes eight grocery bags a day to be given away. Coffee is made in Silex

coffee makers twice during the Institute. In return for this promotion, the Silex Company cooperates in furnishing the coffee makers. Earlier it was mentioned that we use Wear-Ever aluminum in all our demonstrations. This organization also cooperates in the matter of prizes by furnishing three pieces of modern aluminum ware. Similar arrangements were made in giving away a set of nested bowls and baking dishes from the Crooksville China Company, and a set of kitchen cutlery from the Clyde Cutlery Company.

#### *Prizes Offered*

Our grand prize at each Institute is a divided top gas range, made possible through cooperation of the manufacturer. Several attractive food servings prepared in the demonstrations can be used as prizes. Often the cooperating accounts wish to give away prizes apart from those which they have contributed toward the baskets. The bakery sometimes gives a bread ticket. The milk account may give milk tickets. The soft drink dealer often gives a case of soft drinks on one or more days. The florist usually gives a large bouquet of cut flowers or several potted plants. If the Institute is held in a theater, the management sometimes gives a pair of complimentary tickets each day in exchange for mention of the feature picture. In one city the cooperating grocery chain became so enthusiastic that it asked permission to give away a gas range, also.

Even though all of these prizes are not available in any one city, the quantity and value is sufficient to provide an attraction. In the matter of prizes, we don't want to fool ourselves. We know that one-fourth to one-half of the women often come just in hope of getting prizes. However, in looking over our crowds, we are convinced that we are reaching the substantial homemakers. And no matter for what purpose they attend, it presents us with an opportunity to sell them on the fact that gas is the modern kitchen fuel.

If space permitted it would be interesting to relate the many little human incidents that happen at the meetings. Attention of the audience in every session has been excellent. Stage facilities permitting, the women have swarmed onto the stage after each

meeting. Many congratulate the home service representatives on the manner in which the demonstrations are conducted. One elderly woman said, "Young lady, I just want to shake your hand. When I was young all girls could cook, but I had no idea anyone your age knew so much about it today."

#### *Large Attendance*

Attendance has been excellent. The crowds increase each day of the Institute and in several cities all the women could not be accommodated on the last day. It is not uncommon to have an attendance at one session averaging more than one woman for half of the families in the city. Even with much less saturation, the event becomes a topic of general conversation in the community. Cooperating accounts report that their customers make mention of the Institute for several weeks after the event is held. Public contact employees of the gas company report there still is strong favorable reaction among our customers in cities where the Institute was held early in the fall.

Our Sales Department reports that the prospects received from registration tickets are much above average, though it is not the purpose of the Institutes to pay their way in immediate sales. Newspapers have asked us to make the Institute an annual event and several have expressed the idea that cooking schools of the future will be along these lines. We've had favorable newspaper publicity that couldn't be bought at any price, just by making possible an event that is newsworthy to the whole community.

Such an article should not close without some mention of cost. Because of the large number of Institutes scheduled, we've had the advantage of mass production on our printing and other promotion costs. Newspaper rates alter our advertising cost in every city. Of two things we are sure—we are accomplishing our purpose at only a fraction of the expense we would incur were it not for cooperating agencies; and we are retaining our cooking load at less than one-quarter of the cost that is being expended by the electric industry to obtain it.

It is our sincere belief that The 1937 Gasco Food Institute is proving to be our best promotional investment.

## Industrial Gas Section

Ralph L. Manier, Chairman

Eugene D. Milener, Secretary

Hale A. Clark, Vice-Chairman

# National Commercial and Hotel and Restaurant Sales Conference To Be Held in Philadelphia

**T**HE annual get-together of all gas utility men and appliance manufacturers interested in the sale and servicing of hotel, restaurant and lunch room cooking, as well as all other commercial gas applications, will take place at the Benjamin Franklin Hotel, Philadelphia, Pa., Tuesday and Wednesday, March 2 and 3. This will be the National Commercial and Hotel and Restaurant Sales Conference held under the sponsorship of the Industrial Gas Section of the American Gas Association. The Pennsylvania Gas Association will join the conference in lieu of holding their annual sales meeting. Representatives of gas companies serving both natural and manufactured gas will be in attendance. Last year this sales conference, which was held in Washington, D. C., was attended by men from 21 states.

Commercial gas and appliance sales include all classifications other than residential and manufacturing. Nineteen hundred and thirty-six natural gas sales for commercial purposes increased 13.5% over 1935, with about the same increase in manufactured gas sold for commercial purposes. Appliance sales are also increasing rapidly.

In many companies changes are taking place in the sales methods used for selling commercial gas. New ideas are being tried out and new fields are being attacked. The need for modernization is fully recognized by the majority of commercial and hotel and restaurant customers as well as by the gas companies and appliance manufacturers. How this can best be accomplished in the shortest time is a subject of great importance in fortifying and extending this vital load.

Sales will be the chief theme of this conference, although the present status of gas appliance development and competitive



Ralph L. Manier



H. N. Squier



J. F. Quinn



F. T. Brooks



F. H. Trembly, Jr.



C. E. Lucke, Jr.

*Men who are planning National Commercial and Hotel and Restaurant Sales Conference*

equipment development will receive close attention.

The great diversity of the businesses conducted by our commercial customers makes it desirable to have brought before the conference the views of as many salespeople as possible. Hence a feature of the conference will be symposia on three important fields of gas sales. These are Commercial Space Heating, Volume Water Heating and Commercial Cooking. The discussion leaders in each instance will be men of prominence who have made outstanding records in their fields.

Another feature will be a semi-technical description of the new commercial size gas refrigerators, as well as a presentation of sales plans for launching this new outlet for gas.

The program includes the following:

Symposium—Modernizing Kitchens and Increasing the Gas Load.

Symposium—Selling Commercial Water

Heaters—Experiences from the Firing Line.

Symposium—Selling Commercial Space Heaters—Experiences from the Firing Line. How Commercial Sales Are Made—Four Case Histories.

Selling Gas Appliances for Brewing the National Beverage.

The A B C of Deep Fat Frying.

Direct Mail Advertising as a Selling Aid.

Semi-technical Description of New Commercial Gas Refrigerator.

Plans for Merchandizing New Commercial Gas Refrigerator.

There will be a luncheon on Tuesday at which a prominent gas executive will speak on a subject that is particularly important to the sale of commercial gas at this time. The Wednesday luncheon

will be informal and will give that attending the conference an opportunity to get better acquainted and discuss mutual problems more fully.

There will be on display a wide variety of modern counter gas cooking appliances. This display will be sponsored by The Philadelphia Gas Works Company.

Make your hotel reservations early, direct with the hotel.

A meeting of the Managing Committee of the Industrial Gas Section will be held on Monday, March 1, the day before the conference, at the Benjamin Franklin Hotel.

Plans for the conference have been made by C. E. Lucke, Jr., chairman of the Commercial Cooking & Baking Committee, J. F. Quinn, chairman of the General Commercial Committee, Frank H. Trembly, Jr., F. T. Brooks, and H. N. Squier and H. S. Christman, president and vice-president respectively of the Pennsylvania Gas Association.

## Commercial Cooking School To Teach Gas Salesmen

A NOVEL but much needed departure from conventional methods of educating commercial salesmen will be inaugurated February 15, by the New England Gas Association. Under the auspices of a commercial cooking school committee, headed by Cecil C. Ogren of Malden, the Industrial Division of the New England Gas Association will run a five and one-half day school for all engaged in commercial cooking activities.

The general purpose of the school is to educate salesmen and sales managers in charge of hotel, restaurant, cafeteria, institutional and other commercial cooking activities in the market possibilities, equip-

ment, competitive fuels, and in the planning and selling of the actual installations.

Most significant in the program will be the lectures devoted to commercial kitchen planning, a field which is considered by leaders in the industry to be almost untouched. The sessions will be given by one of the nationally recognized experts and should be of extraordinary interest to the gas sales forces. In addition, the committee has been fortunate in securing recognized leaders, both within and without the gas industry, to deliver the lectures and demonstrations.

Two speakers have been selected from the American Gas Association to conduct different phases of the school. In the Monday afternoon session devoted to Fuels, C. George Segeler, utilization engineer, will cover gas and coal. Oil, electricity and liquified gas will be discussed by other speakers. Eugene D. Milener, secretary of the A. G. A. Industrial Gas Section, will conduct the lecture on Air Conditioning on Thursday afternoon.

### To Discuss Markets

Professor R. F. Elder of the Massachusetts Institute of Technology will lecture at the first session, Monday morning. Under the general heading of Markets, Professor Elder will discuss the importance of markets, their characteristics, surveys, how to analyze and how to approach. Other divisions of the school, such as Equipment, Kitchen Planning, Selling and Cooking Demonstrations, have been assigned to various experts, many of them taken directly from the firing line of the gas industry.

The registration fee for the school will be \$25 and while the enrollment will probably be limited to about sixty men, the committee has agreed to accept registrations from outside of New England if made at least two weeks in advance of the school. Reservations may be sent to the New England Gas Association, 41 Mt. Vernon Street, Boston, Massachusetts.

### Speaks on Research

Eugene D. Milener, secretary, Committee on Industrial Gas Research, addressed the Board of Trade of Derby, Conn., January 18. His topic was "Fundamental Research and Its Aid to Business."

### Managing Committee Meeting

The Managing Committee of the Industrial Gas Section will meet at the Benjamin Franklin Hotel, Philadelphia, Pa., on Monday, March 1, at 10:00 A.M.

## Gas Oyster Stewer



A DELICIOUS oyster stew can be made with gas in 1¼ minutes in the improved direct-fired oyster stewer and chafing dish just announced by the Vulcan Division of the Standard Gas Equipment Corporation. Long a favorite with hotels, restaurants, chain stores and soda fountains, etc., this oyster stewer has recently been improved in both design and construction.

Made with an aluminum bowl, it heats rapidly due to special fins on the bottom of the bowl. The bowl is of polished aluminum which adds to the appearance of the stewer and heats faster.

The stewer is designed so that when it is in use the gas burner is turned full on, but when the bowl is tipped the burner is automatically turned down to a very low point, not only saving gas but also making for extreme convenience in operation.

An additional convenience is a spider grid which can be used in place of the bowl for boiling or frying. This makes the appliance useful the year 'round.

This gas stewer is of handsome appearance and can be placed on the counter so stew can be made in full view. It contributes to the growing list of counter gas appliances.

## GOING AHEAD

### WITH INDUSTRIAL GAS

All you commercial gas men plan now to attend the National Conference on Commercial Gas in Philadelphia, March 2 and 3. Charlie Lucke says it will be a humdinger with new stuff for men on the firing line as well as sales managers. The Pennsylvania Gas Association will be there in a body.

We are told that the restaurants that advertise "Ceramic Broiled Steaks" are doing a good business in broiled goods. Looks like gas now has a good weapon to chase "Charcoal Broiled Steaks" off the menu cards.



North American Manufacturing Company, Surface Combustion Corporation and American Gas Furnace Company are among the firms using two-color industrial gas advertisements in trade papers. Nice work, and may the list grow.

The industrial gas men were not a bit backward at the National Power and Mechanical Engineering Exposition either. The largest single booth at the show was the gas booth. 'Twas activity there, too. Designed under Ray Martin's capable direction, it was among the most beautiful booths of all.

The Industrial Gas Section is particularly proud to have Bob Guthrie of Chicago as chairman of the Ferrous Metals Committee this year. Although a dyed in the wool gas man, Bob is one of the best known and most capable metallurgists in the country. He has had bestowed upon him almost every honor a metallurgist can have including the presidency of the American Society for Metals.

Henry Loebell's committee will soon start a new series of sales letters for members of the Industrial Gas Section. Everybody seemed to get a kick out of the 1936 series.

This column would like to hear of any phrases distinctive of gas that are being used by industrial or commercial gas customers to promote their businesses. Among the successful ones are "Hot Off the Broilator" and the aforementioned "Enjoy a Ceramic Broiled Steak." If you have any YOU THINK would be good, send them in also.



## Technical Section

M. I. Mix, Chairman

H. W. Hartman, Secretary

J. V. Postles, Vice-Chairman

# Determining Gas Combustion Characteristics

THE solution of many problems in which gas is used as a fuel for either domestic or industrial appliances requires a knowledge of the combustion characteristics of the gas burned. This information may be obtained in a general way from tables in various texts on gaseous fuels but the most accurate results are obtained by determining the combustion data for the particular type of gas used. Our Laboratory has made careful analyses and tests of both the carburetted water gas and the mixed gas supplied by our company. Based on these tests we have prepared a set of charts by means of which the combustion data necessary for determining the combustion efficiency of a gas-fired appliance may be quickly determined and with a degree of accuracy sufficient for all practical purposes. The loss of heat due to any dissociation of carbon dioxide or of water vapor in the products of combustion has not been included since the amount of heat lost as a result of dissociation is usually very small. This is due to the fact that the flue gases seldom attain a temperature which is high enough for dissociation to occur to any measurable degree.

By J. F. ANTHERS

The Brooklyn Union Gas Company

The analytical procedure used in obtaining our combustion data has been published in *Gas Age-Record*, Volume 74, page 82, and hence will not be described at this time.

The charts which we have made will cover all cases of combustion complete and incomplete, for the types of gases manufactured by our company. The use of these charts can best be explained by means of the following examples.

Chart 1 should only be used when there is no CO present in the flue gas. Having determined the per cent of  $\text{CO}_2$  and  $\text{O}_2$  in the flue gas, the ultimate  $\text{CO}_2$  and per cent of excess air may be read directly from the chart.

Let us assume the following flue gas analysis:

$\text{CO}_2$	9.5%
$\text{O}_2$	5.7%
$\text{N}_2$	84.8%
	100.0%

Find the intersection of the vertical line corresponding to 9.5%  $\text{CO}_2$  with the horizontal line corresponding to 5.7%  $\text{O}_2$ . This point will be found to fall on the inclined line which represents an ultimate  $\text{CO}_2$  of 13%, and on the horizontal line which corresponds to 35% of excess air.

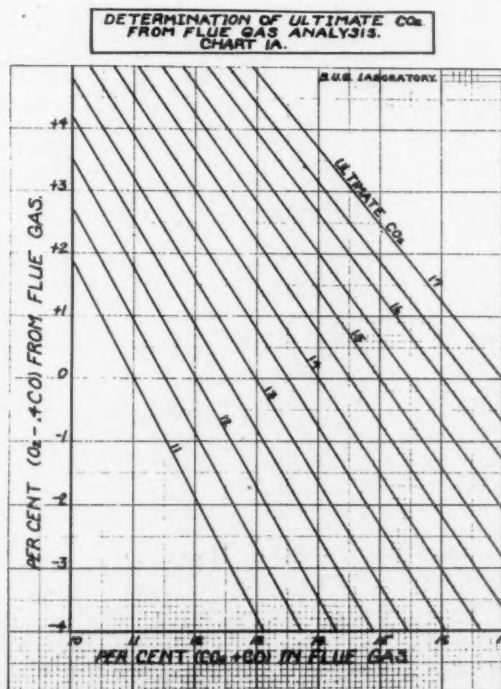
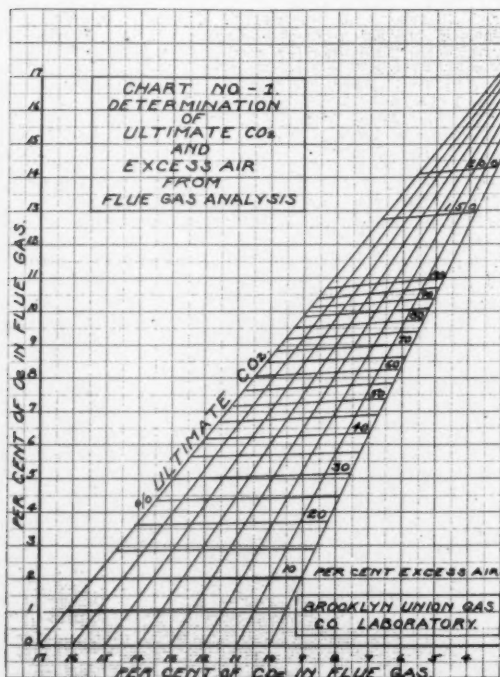
Chart 1A should be used when CO is present in the flue gas. Having determined the per cent of  $\text{CO}_2$ , CO and  $\text{O}_2$  in the flue gas, the ultimate  $\text{CO}_2$  may be read from the chart.

Let us assume the following flue gas analysis:

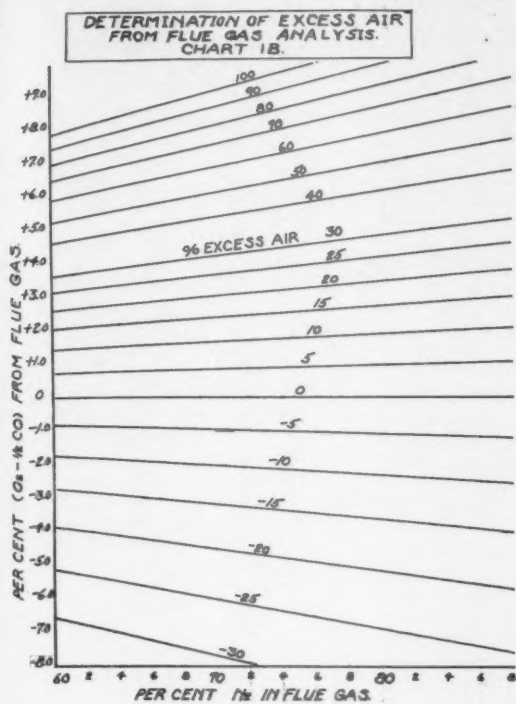
$\text{CO}_2$	10.8%
$\text{O}_2$	1.3%
CO	3.2%
$\text{N}_2$	84.7%
	100.0%

Find the intersection of the vertical line, 14%, corresponding to the sum of the per cent of  $\text{CO}_2$  and CO in the flue gas with the horizontal line, 0, corresponding to the per cent of  $\text{O}_2$  minus 0.4, the per cent of

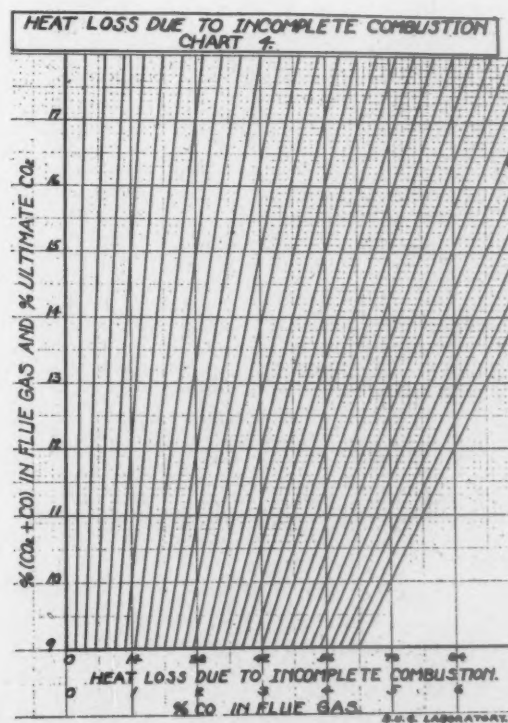
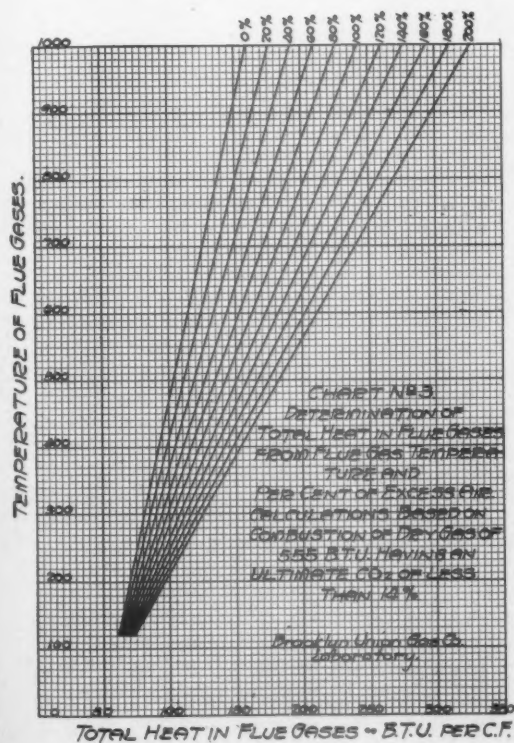
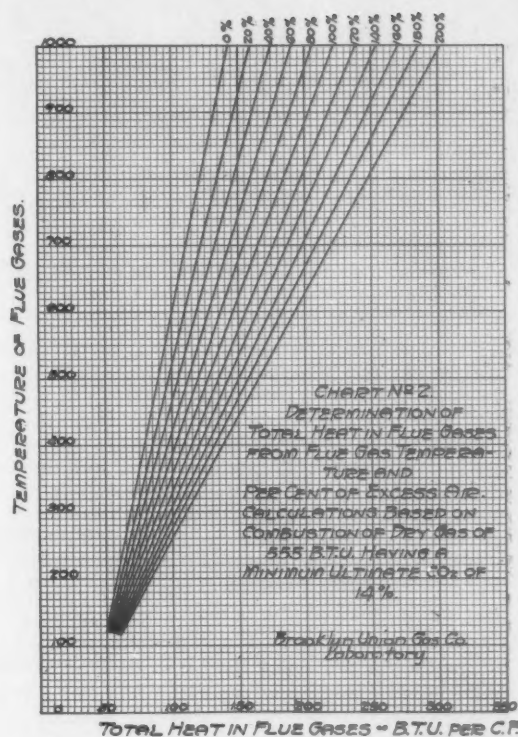
(Continued on page 78)







S. U. S. LABORATORY



## Testing Laboratories

R. M. Conner, Director

Managing Committee: J. S. DeHart, Jr., Chairman

N. T. Sellman, Secretary

# Three New Standards Recently Approved by American Standards Association

ON December 8, 1936 the American Standards Association approved as American Standard three newly revised Approval Requirements for Gas Space Heaters, Central Heating Gas Appliances and Listing Requirements for Semi-Rigid Gas Appliance Tubing and Fittings.

These are now available as printed booklets and identical with those distributed in mimeographed form to all manufacturers early last year. The three revised standards became effective on January 1, 1937. Copies of the printed booklets have been mailed to all interested manufacturers.

The new standards differ materially from preceding editions. While it is not practical to discuss all changes, a few of the new provisions are noted here.

### Space Heater Revisions

Some of the more important revisions made include such stipulations as air shutters on conventional type Bunsen burners and minimum thickness and weights of material not previously specified. Also numerous requirements on accessories have been incorporated covering such important items as draft hoods, semi-rigid tubing and fittings, burner valves, automatic devices to prevent the escape of unburned gas, etc. In most cases the listing requirements for these devices have been included by reference. In the others the application of these devices to space heaters required slight modification in the testing standards insofar as methods were concerned.

It is the established policy of the American Gas Association to require the same or equivalent construction and performance of accessories used on all appliances that are required of such appliances when examined for listing under the accessory standards.

It should also be noted that the revised Space Heater Standards, effective January 1, 1937, specify the application of test pressures to the inlet of the regulator, where one is supplied, during all performance tests on heaters for use with natural and manufactured gas and with butane-air gas. During the combustion test on unvented space heaters conducted at 1.5 normal pressure, and where such heaters are equipped with regulators, the gas rate to the appliance is increased by 12 per cent above the input rate at normal pressure, this being accomplished by either adjustment or enlargement of the orifice. In the case of both vented and unvented space heaters for use

By B. K. PAGET

### A. G. A. Testing Laboratories

with propane gas, however, the regulator, where one is supplied, is removed during the performance tests and the various test pressures applied directly to the heater.

### Semi-Rigid Tubing and Fittings

The revised edition of the American Standard Listing Requirements for Semi-Rigid Gas Appliance Tubing and Fittings contains several additional requirements not previously included. The requirements for fittings as well as those for tubing dimensions have been extended and clarified. Acceptable fittings are now definitely specified as either flared or compression type and the exact specifications called for by the Society of Automotive Engineers, which were previously called for by name only, have now been incorporated in the Standards in the form of exhibits of tables of dimensions and outline drawings.

Confusion is further eliminated by inclusion of additional tubing sizes by sixteenths of an inch where increments of one-eighth inch only were shown before. In addition, pipe threads have been coordinated with the American Standard for pipe threads and threads on the fittings themselves are required to be in accordance with the S.A.E. Fine Thread Series. Particularly worthy of note is the recommendation of Sections 5-f which says "It is recommended that flared type fittings be used exclusively on semi-rigid tubing employed for connecting portable gas appliances to the house piping."

Manufacturers should bear in mind that, while the exhibited dimensions and tables were taken from the S.A.E. Handbook for 1935, any new editions or revisions of this handbook will take precedence over the exhibits now printed as part of the 1937 American Standard Listing Requirements for Semi-Rigid Gas Appliance Tubing and Fittings in the application of these standards by the Testing Laboratories.

### Central Heating Appliances

The majority of the revisions in the Approval Requirements for Central Heating Gas Appliances are concerned with correlating them with the listing requirements for accessories in much the same manner that those for space heaters were handled.

Devices must be installed to prevent water temperatures from exceeding 239° F., and the maximum permissible gas rate to pilots must be reduced from ten to five feet of gas per hour which is a definite move for economy. In addition, all boiler, basement furnaces and remotely controlled floor furnaces must now be fitted with an automatic device to prevent escape of unburned gas. This is felt to be an important step forward as is also the requirement making gas pressure regulators mandatory on all floor furnaces.

Printed copies of all Approval Requirements may be obtained from the American Gas Association Testing Laboratories, 1032 East 62nd Street, Cleveland, Ohio or from the Association's Headquarters in New York City.

## Gas-Control Valve Standards

CERTAIN revisions to the American Standard Listing Requirements for Automatic Main Gas-Control Valves were approved on January 15, 1937 for immediate application.

The situation was brought about by recognition that the listing requirement on manually operated valves required, under Part II, Section 4, that such valve withstand 50,000 cycles of operation without mechanical failure, impairment of operation, apparent damage, undue heating and without the development of leakage or excessive noise. Since this test is the equivalent of about 50 years of service it was deemed unnecessarily severe.

This matter was recently considered by the subgroup on Automatic Main Gas-Control Valves and by the Subcommittee on Listing Requirements for Gas Pressure and Temperature Control Accessories and the number of cycles of operation reduced from 50,000 to 25,000 cycles. The action of the subcommittees was subsequently endorsed by the A.S.A. Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee for immediate enforcement.

Those having copies of the American Standard Listing Requirements for Automatic Main Gas-Control Valves, Z21.21-1935, effective January 1, 1936, may wish to change them accordingly. The correction involves changing the next to the last sentence under the requirement of Part II, Section 4, Continued Operation, clause "a,"

page 6, to read: "Auto-modulating electric gas-control valves and those designed to be operated either directly or remotely by hand, shall withstand 25,000 cycles of electrically opening and closing," and the deletion of the last sentence reading: "Manually operated type valves shall withstand 50,000 cycles."

## Gas Water Heater Standards Revised

**R**EVISIONS to the American Standard Approval Requirements for Gas Water Heaters, Z21.10-1935, effective January 1, 1936, adopted by the Subcommittee at its December, 1935, and two 1936 meetings were printed and distributed to all member companies of the American Gas Association for criticism in January.

These changes involve a large number of both the construction and performance requirements and tend to clarify and extend the requirements although some have been

made less rigid, while others have been deleted.

The interested committees would welcome any comments or constructive criticism concerning these revisions that member companies may care to submit. Any such comments should be addressed to R. B. Harper, chairman, A.S.A. Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee, in care of the American Gas Association Testing Laboratories, 1032 East 62nd Street, Cleveland, Ohio. In order for such communications to receive consideration by both the subcommittee and the Approval Requirements Committee, they should be mailed not later than February 15.

The criticisms submitted will be considered by the water heater subcommittee at its next meeting late in February or early in March and subsequently by the Approval Requirements Committee at the spring meeting of that group. It is expected that mimeographed copies of the revised edition of the water heater standards will be available in May or June and will become effective January 1, 1938.

## Gas Hair Dryer Approval Requirements Issued

**A**PPROVAL requirements for gas hair dryers which have been in the course of preparation during the past year and one half have been placed in final form and are now pending approval as American Standard before the American Standards Association. Mimeographed copies of these standards have been distributed to all manufacturers of hair dryers as well as to all producers of gas control devices and accessories used on such equipment.

### Correlated Standards

The new standards, which become effective January 1, 1937, cover in detail all phases of construction and performance and are completely correlated with the various listing requirements for gas appliance accessories such as burner valves, draft hoods, pressure regulators, thermostats, etc. The American Gas Association Testing Laboratories are now in position to test gas hair dryer equipment for approval under these new standards.

Prior to the preparation of standards for hair dryers a few appliances of this type were tested and approved under the space heater, unit heater or central heating requirements as an aid to the industry in insuring proper safety and construction of such equipment. Hair dryers approved as such, were listed in the Directory of Approved Gas Appliances and Listed Accessories under the classification of space heaters, central heating appliances or unit heaters depending on the type of standards under which they were tested.

With the development of specific requirements for hair dryers, the Subcommittee on Approval Requirements for Gas Hair Dryers felt that a policy should be established relative to those dryers previously tested under other standards. Therefore, at its January 1936 meeting, the Subcommittee adopted the following policies which were approved by the A. G. A. Approval Requirements Committee on April 23, 1936:

1. Hair dryers already approved under other appliance standards cannot be listed as hair dryers in the Association's Directory of Approved Gas Appliances and Listed Accessories unless such appliances are re-submitted for test and approved under the Approval Requirements for Gas Hair Dryers.
2. Hair dryers which have been tested and approved under the requirements for space heaters, unit heaters, or other standards, may continue to be approved and listed as such for a maximum period of five years from the date of original approval, but must be re-tested and approved under the hair dryer standards at the end of that period if approval is to be extended.
3. This committee strongly recommends that all hair dryers now approved under other appliance standards and listed accordingly be re-submitted for compliance with the Approval Requirements for Gas Hair Dryers as soon as such requirements are available.

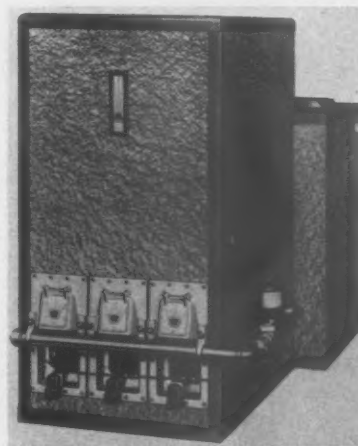
## Laboratories' Technician Joins Cribben & Sexton

**J.** RICHARD HALL left the American Gas Association Testing Laboratories on November 30, to take a position with the Cribben & Sexton Company, Chicago, Illinois. His new duties are concerned with the experimentation and testing required in the development of new gas range models.

Mr. Hall joined the staff of the Testing Laboratories in December, 1935, as an engineer. He has been active in research on fundamental improvements on domestic gas appliances as well as the investigations made for various subcommittees in developing and revising requirements for the testing of gas appliances and accessories. Although transferred to the range section of the testing department for a short period, he has recently been engaged in the studies of furnace atmospheres conducted for the Industrial Gas Research Committee.

Mr. Hall graduated from Cornell University, Ithaca, New York, with the degree of Mechanical Engineer in June of 1930. Before his connection with the Testing Laboratories in Cleveland, he was employed by the Los Angeles Cooling and Air-Conditioning Company, Los Angeles, California, and the Chandler Motor Corporation, Cleveland, Ohio.

## New Gas-Fired Air Conditioner



New gas-fired air conditioning unit with steel heating element, which has just been announced by The Fox Furnace Company, Elyria, Ohio. The outer casing, of modern design, is finished in green crystalline enamel with contrasting trim of dark green glossy enamel. Each steel heating element is made of two sections which are welded together to make a seamless, leakproof unit. Space saving compactness is one of the features of this new unit.



## LET'S TALK GAS RANGES

(Continued from page 58)

when you have a work table right on your range.

Oven burners and top burners light automatically. No matches; no push buttons. It's almost magic!

Gas cocks on one range are set in an "instrument board" at the back like the instrument panel on a car. The front of the range is trim and flush, the cocks are easy to reach, yet are out of the way of small children.

Monel metal and stainless steel are used more and more frequently for work surfaces, and broiler pan grids, and for more than one good reason. They are practical, and practically indestructible. They have a certain resilience which makes them quiet to work on. Their silvery luster is attractive and easy to keep spick and span.

Automatic time clocks, lamps, whole-meal cookers, warming ovens, utensil drawers and cupboards, dual burners with simmering sections, condiment sets—I'd love to tell you about these, too, but here I am at the end of the page. Besides, you really must see these new ranges yourself, see what they offer in convenient, efficient cooking service; in freedom for leisure; in pride of ownership which is part of good-looking equipment.

## DOMESTIC GAS RESEARCH

(Continued from page 62)

domestic gas research is now under way. This covers gas water heaters, and the Executive Board has approved the outline and procedure covering work for some time to come. Manufacturer members acting through the Association of Gas Appliance and Equipment Manufacturers are whole-heartedly co-operating in these projects. Engineers selected from the gas range and water heater divisions of that organization have been assigned to serve in an advisory capacity to the Domestic Research Committee.

This bulletin indicates how the gas industry is attacking its problems. The ultimate results of this whole research program should be not only to improve the performance and efficiency of domestic gas appliances but to continue to place our product in an even more advantageous competitive position than

it is enjoying now. The psychological effects of such a program cannot be overestimated, for it offers one of the most effective means of presenting proof that the gas industry is determined to go forward, that it is alive to its opportunities for expansion, and that it means to obtain its rightful share of our national prosperity.

## GAS COMBUSTION CHARACTERISTICS

(Continued from page 74)

CO. The point will be found to fall on the inclined line which represents an ultimate CO<sub>2</sub> of 14%.

Chart 1B should be used when CO is present in the flue gas. Having determined the composition of the flue gas the per cent of excess air may be read from the chart.

Let us assume the following flue gas analysis:

CO <sub>2</sub>	11.6%
O <sub>2</sub>	2.2%
CO	2.4%
N <sub>2</sub>	83.8%
	100.0%

Find the intersection of the vertical line corresponding to 83.8% N<sub>2</sub> with the horizontal line, —1.0, corresponding to the per cent of O<sub>2</sub> minus 1/2 the per cent of CO. The point will be found to fall on the inclined line which represents (by interpolation) an excess air of —4.5 1/2, which is in reality a deficiency of air.

Chart 2 should be used when both the flue gas temperature and the per cent of excess air are known, and the ultimate CO<sub>2</sub> of the gas is equal to or greater than 14.0%.

Let us assume that the flue gas temperature is 600° F., the per cent of excess air, 60%, and the ultimate CO<sub>2</sub>, 15%.

Find the intersection of the inclined line corresponding to 60% excess air with the horizontal line corresponding to a flue gas temperature of 600° F. This point will be found to fall on the vertical line which represents 127 B.t.u. This is the total amount of heat lost in burning one cubic foot of gas, and represents the sum of the sensible heat loss and that due to uncondensed water vapor in the flue gas.

Chart 3 should be used when both the flue gas temperature and the per cent of excess air are known, and the ultimate CO<sub>2</sub> of the gas is less than 14.0%.

It is used in the same manner as that described for Chart 2.

Chart 4 should be used when CO is present in the flue gas. Having determined the composition of the flue gas, the heat lost due to incomplete combustion may be read from the chart after the ultimate CO<sub>2</sub> has been determined.

Let us assume the following flue gas analysis:

CO <sub>2</sub>	10.4%
O <sub>2</sub>	0.6%
CO	3.6%
N <sub>2</sub>	85.4%
	100.0%

Using Chart 1A as previously described the ultimate CO<sub>2</sub> of the gas will be found to be 13.5%.

Using Chart 4, find the intersection of the horizontal line corresponding to the sum of 10.4% of CO<sub>2</sub> and 3.6% of CO with the vertical line corresponding to 3.6% of CO. This point will be found to fall on an inclined line. Proceed downward along this inclined line to its intersection with the horizontal line corresponding to 13.5% of CO<sub>2</sub> (ultimate CO<sub>2</sub>). At this point it intersects the vertical line corresponding to the B.t.u. lost due to incomplete combustion which would be equal to 47.6 B.t.u. for the example cited.

The combustion efficiency of a gas-fired appliance may be calculated from the following formula:

$$\text{Combustion Efficiency} = \frac{A - (B + C)}{A}$$

where

A = Gross B.t.u. of dry gas

B = Total heat lost in flue gas

C = Heat lost through incomplete combustion

## USE OF SALES STATISTICS

(Continued from page 67)

obtained by special analysis would have still been required, as statistics, even if currently maintained, would have been inadequate.

## Comments

Accounting officers who commented on the value of sales statistics expressed varying and contrasting opinions as to why statistics should or should not be currently maintained.

One of the larger groups of properties reported an analysis of over 500 towns, made a few years ago, were plotted on curves and that subsequent tests have demonstrated that the figures made at that time were over 98% correct when the curves were later used for rate making purposes.

Another company, whose analysis has previously been confined to rate step breakdowns, and sales classifications by classes of service is in process of changing its system to furnish a complete consumption step breakdown. This will result, according to its statement of the elimination of special analysis which have been made over the past several years because information will be available to meet certain requirements although it is not anticipated that any analysis can be maintained currently and provide all basic statistics which might be required without resulting in a system which would be cumbersome.

An interesting example of the divergence of opinion was expressed by two account-



ing executives connected with two of the larger utilities operating in the same State under the jurisdiction of a State Commission. One executive expressed the opinion that due to the demands of rate departments, regulatory bodies and taxing authorities, the availability of sales statistics was most necessary, whereas the other executive expressed the opinion that although essential in certain cases, the cost of maintaining and accumulating such statistics which produce profitable results are difficult to determine and accordingly should only be made as required.

#### Conclusion

From the analysis of the reporting companies the most obvious conclusion is that there is a marked lack of unanimity as to the necessity of sales statistics, as well as to their preparation and use. The divergence of opinion may be attributed to management policies, company and commission requirements and economic needs, although unquestionably personal individual opinions govern to some extent their use from the replies received. The committee found no outstanding example of how sales statistics could be applied profitably except in the customary fields of rate making, and for the general information they convey to management.

### A. G. A. Cable Addresses

TO enable foreign correspondents to save on cable tolls, the American Gas Association Testing Laboratory, 1032 East 62nd Street, Cleveland, Ohio, has selected and registered a cable address with the communication companies in Cleveland. It is: AMERGASLAB, CLEVELAND, OHIO.

The registered cable address of American Gas Association headquarters at 420 Lexington Ave., New York, N. Y., remains as heretofore: AMERIGAS, NEW YORK.

### Gas Company Aids Game Conservation

COOPERATION of the Ohio Fuel Gas Company with the state conservation department in the propagation of wild life was revealed recently with the announcement by Larry Wooddell, Ohio conservation commissioner, that the gas company has established a small game preserve for the raising of pheasants at Boden, Guernsey county.

Established in May, 1936, on a 6-acre tract, the gas company has reared 600 pheasants which are now ready for distribution to the various game preserves during the next sixty or ninety days, in accordance with the dictates of the conservation division.

Approximately 1,200 eggs have been set since May and most of the hatching has been done by Rhode Island red hens, although one consignment of eggs was

placed in a commercial hatchery. The gas company has installed this hatchery in order to aid the conservation division as well as to encourage a broader policy of conservation among individuals and business interests of the state.

Information on this project was furnished the conservation department by A. E. Bradbury, an executive of the gas company.—*Public Utilities Fortnightly.*

### A. G. A. Contest Tie-up

THE Dallas (Tex.) Gas Company, January 2, inaugurated a two-month campaign on gas water heaters, tying in with the American Gas Association's national campaign. C. K. Patton, new business manager for the company, is directing the campaign, interest in which is being stimulated by inter-company team contests among employees.

### Netsui

READERS of Donald Henry's contribution on the small thermal unit for gas measurement to the report of the Rate Structure Committee which was presented at the A. G. A. Convention last October by the chairman, Alfred I. Phillips, will be interested in the "Netsui."

In 1928 the Imperial Gas Association of Japan defined the Japanese heat unit (J. H. U.) or *Netsui* as 10,000 calories (39,683 B.t.u.).

The Toho Gas Company in 1930, after obtaining the necessary sanction, set an example in selling gas on the new basis; the price selected was 38 sen per *Netsui* for a gas of 4,500 calories per cubic meter (474 B.t.u. per cubic foot).

In 1932 the Tokyo Gas Company made the system applicable to 750,000 of its customers, the heating value selected being 4,200 calories per cubic meter (443 B.t.u. per cubic foot). Other Japanese gas companies at present adhere to the volume basis for sale of gas.—A. G. K.

### A. G. A. MOVIE

(Continued from page 57)

Built" is being produced under the personal supervision of Mason Wadsworth. Direction is by Charles Hutchinson, well-known as director for Pathé, and scenario was written by Arthur Hoerl, prominent film writer, who has authored scripts for Universal, First National and other major film producers. The film is being prepared under supervision of a committee representing the Commercial Section and the Publicity and Advertising Committee of the Association.

### A Cold-Blooded Analysis

(From *Postage and The Mailbag*)

THE recent convention of the American Gas Association at Atlantic City indicates that the gas industry has analyzed itself cold-bloodedly and has discovered that in spite of this being the electrical age there are plenty of reasons why gas is going to remain in the picture. The gas men have discovered that energy in the form of heat units can be delivered far more efficiently through a pipe than over a wire. As one speaker said:

"Out in California, there is a 183-mile electric transmission line. Under it runs a twenty-two-inch gas pipeline. The gas line delivers seventy-five times as many heat units at the other end as does the 220,000-volt wire system and it costs only \$65 for each million horse-power-hours transmitted, compared with \$190 for the electric line. Gas can be made in the summer and stored under high pressure in underground tanks for winter demands—and you can't do that with electricity. And as for the supply, the American Gas Association estimates the national coal reserves as enough for 4,500 years."

### Fred Rees Dies

J. FRED REES, local agent of Union Gas System, Inc., Independence, Kansas, died suddenly December 31. He was 57 years of age.

Mr. Rees had been employed by the company and its immediate predecessors for a period of 25 years. For the past 18 years he served as manager of the local distribution plant.

### McCarter Medal

A McCARTER Medal and Certificate was presented to Elmer Dane, employee of the Public Service Electric and Gas Company, Paterson, N. J., on December 29 at the local plant for an outstanding act of life saving performed last March 30. H. H. Ferris, general manager, gas department, made the presentation. At the same time Sidney Schofield, also employed by Public Service, received a certificate of assistance for his efforts in aiding Dane.

The act for which Dane and Schofield were so singularly honored was the successful resuscitation by use of the Schafer prone pressure method of an elderly man who had been overcome by gas.

The McCarter Medal is presented through the generosity of Thomas J. McCarter, president of the Public Service Electric and Gas Company, and is awarded by the American Gas Association through its Accident Prevention Committee.

# Personnel Service

## SERVICES OFFERED

### Accounting, Auditing, Bookkeeping, Clerical and Office Workers

Consultant, long experience as manager, cosmopolitan cities, desires temporary engagements to investigate, criticize or cooperate in the handling of customer accounts, dealings with customers, personnel, accident compensation, negligence claims. Anything pertaining to the business or customer side of the gas industry. Any city, any time, long or short periods. 1083.

### Advertising, Publicity and Public Relations

Advertising executive of wide experience with background of publicity work in the utility field desires position with a public utility or commercial organization desirous of building good will and increasing appliance or merchandise sales. Specialized in gas fuel and domestic refrigeration campaign work. Salary commensurate with results obtained. 1096.

Display and advertising artist now available. Nine years' utility—seventeen years' total experience. Seven years in last position. Thorough knowledge of all phases of utility advertising and display work. A talented producer with a fine record. (38). 1100.

### Chemists, Physicists and Research Workers

(Classification records available)

### Engineers

Graduate mechanical engineer—Broad technical experience in the gas industry, including both manufactured and natural gas—sales, production, utilization, distribution, construction, rate making, appraisals and reports. Available on short notice. 1080.

Appraisal engineer, four years appraisal experience on gas and electric utilities and background of more than twenty-five years' actual management, operation and construction of manufactured and natural gas utilities. Have made rate studies, written reports and very familiar with public utility accounting. Available immediately. 1091.

Inventory, valuation engineer for utility and pipe line appraisals, depreciation studies, private investigations and reports made for utilities of special problems. Will go anywhere, single. (39). 1095.

### Managers and Superintendents

Twenty years of experience in executive capacity in utility management, including electrical contracting and merchandising of fixtures, electrical ranges and refrigerating machines; in last eight years' management of forty-three million dollar company, gross earnings increased four and one-half and net earnings ten and one-fourth times. 1085.

Experienced gas engineer operator and manager. Actual experience coal gas, water gas, transmission and distribution construction, operation and maintenance, chemical laboratory, selling, servicing, and installation of gas appliances, office routine billing, consumer's ledger, collecting, daily and monthly operating and financial reports, and budgets. Invites interview. 1098.

### Salesmen and Sales Engineers

Can you use any of these: Ability to get and hold dealer cooperation, general sales-promotional and public relations or advertising service, singly or in combination, all ripened by broad business experience and supported by impressive proof? Available without delusions of grandeur as to compensation. 1082.

Sales and promotion of appliances for house-heating, domestic and small power and industrial installations. Previous utility experience includes supervising and operating mixed gas systems, natural gas changeover, distribution and utilization. 1084.

## SERVICES OFFERED

### Salesmen and Sales Engineers

(continued)

Services of able and energetic man offered as representative in New York holding corporation utility fields: proposed work to cover sales promotion and presentation of products to utility headquarters and passing back reaction of reception along with suggestions to factory executive. Interview requested with substantial manufacturer. 1086.

Gas sales engineer. College graduate, experienced in marketing natural gas to institutions for heating; oil refineries, glass and paint companies; ceramic, ice and power plants, salt companies and heat treating plants. Familiar with design and installation of metering, regulating and burning equipment. Now employed. 1088.

Sales engineer. Househeating, water heating and industrial application. Supervisory capacity. Experience covers surveys, sales, maintenance, sales promotion, reports, installation, service and repairs. Broad general and technical knowledge and excellent public relations. Married. 1089.

As factory representative and salesman, with high grade gas range manufacturer or other gas appliance, approved by the A. G. A. Am familiar with the gas utilities of New York State, their personnel, also dealers. Am a producer and hustler. 1092.

College graduate (29) single, with over five years' experience on gas house heating sales, installation, and service work with gas company. Can make surveys, prepare estimates, supervise installations, and train service men as well as salesmen. Desires position manufacturer or gas company. 1093.

Do you need an industrial gas salesman or house heating supervisor? I am a graduate engineer with over ten years' experience in this work and have had responsible charge. I should like to discuss your problems and my experience with you. 1094.

## SERVICES OFFERED

### Salesmen and Sales Engineers

(continued)

Fourteen years' experience in gas and coke oven work. Thoroughly trained in operation, maintenance and repairs of coke ovens, producers and water gas plants. Considerable experimental work in this field, including coke sales. Desire suitable position with utility and opportunity for advancement. College graduate; married. 1097.

Man with 20 years' experience with two large gas companies wishes position in distribution, industrial sales or house heating departments. Have been in charge of distribution and industrial sales departments and had experience in house heating and winter air conditioning. 1099.

Sales engineer. Graduate engineer, wide acquaintance in the industry, successful background several large companies in construction gas manufacturing plants and utilization of gas; extensive experience in sale of building materials and equipment allied with gas industry. As gas company industrial engineer or with manufacturer of equipment; preferred location East. 1101.

### Miscellaneous

Young man, university graduate 1936, B.S. in Economics, public affairs major; interested in public relations work. Desires to become associated with gas or electric company, willing to learn business and start as a cadet. Good worker, references. 1090.

Permanent connection as service man with gas company or range manufacturer. Have had experience on meter, appliance fitting and general complaint work. For the past four years have been specializing in range repairs. Will go anywhere after giving my present employers due notice. Long service record. 1102.

## SELF SALESMANSHIP

### The Interview

Selling his services is the supreme sales test which may sometime confront any man. Some are fortunate and need not make the sale often; others, through no fault of their own, must perforce go more frequently into the market.

Fundamentally sound and proven sales procedure controls, as with any other merchandise. Clark Belden, Secretary of the New England Gas Association, in his book "Job Hunting and Getting," Chapter VII on conducting better interviews, lists the following among the reasons why some job seekers don't conduct successful interviews.

They enter the employer's office as though they are afraid they may be thrown out.

They indicate a lack of poise.

They plunge right into their sales talk the instant they sit down.

They do not act naturally.

They speak too loudly, too tensely, or too fast.

They smoke excessively, indicating nervousness.

They do not present their experience effectively.

They display discouragement.

They tell the employer all their troubles.

They talk in generalities.

They do not think clearly.

In their excitement, they overlook some of their most important facts.

They do not discuss facts which the employer requests them to discuss.

They do not give direct answers to all the employer's questions.

They discuss irrelevant matters.

They talk too much, forcing the employer into the background.

They talk too little, indicating they haven't much to say.

They take too much time to present their story.

They weary the interviewer by a detailed account of themselves, from soup to nuts.

They allow the employer to make a talking post of them.

They ask foolish questions.

They repeat too many times that they will work hard.

They interrupt the employer, taking words out of his mouth.

They fumble through too many papers.

They offer to work for nothing for a trial period.

They repeat too many times that they are very much interested in the job.

They indicate that they are yes-men.

They hold out for an arbitrary salary figure.

They show more interest in what they can get out of the job than in what they can put into it.

They indicate that they would have to unlearn too many unacceptable policies, procedures, and notions.

They do not discuss intelligently the technique of their own past work.

They offer nothing other than purely routine ideas.

They speak from their own viewpoint rather than from that of the employer.

They try to dominate the interview.

They push an employer too hard as to a job's possibilities.

They are unduly emphatic in expressing their opinions.

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